

# BEFORE THE ARIZONA CORPORATION COMMISSION

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- Arizona Corporation Commission

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IN THE MATTER OF THE APPLICATION OF LITCHFIELD PARK SERVICE COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WASTEWATER

RATES AND CHARGES FOR UTILITY 11 SERVICE BASED THEREON.

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IN THE MATTER OF THE APPLICATION OF LITCHFIELD PARK SERVICE COMPANY. AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.

Docket No. SW-01428A-09-0103

Docket No. W-01427A-09-0104

## **RUCO'S NOTICE OF FILING DIRECT TESTIMONY**

The Residential Utility Consumer Office ("RUCO") hereby provides notice of filing the Direct Testimony of William A. Rigsby, CRRA, Matthew Rowell, and Sonn S. Rowell. CPA, in the above-referenced matter.

RESPECTFULLY SUBMITTED this 4th day of November, 2009

Michelle L. Wood

Counsel

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4	1200 West Washington Phoenix, Arizona 85007	
5	COPIES of the foregoing hand delivered/	
6 7	mailed this 4 <sup>th</sup> day of November, 2009 to: The Honorable Dwight D. Nodes,	William P. Sullivan
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# LITCHFIELD PARK SERVICE COMPANY

DOCKET NO. SW-01428A-09-0103

DOCKET NO. W-01427A-09-0104

OF
WILLIAM A. RIGSBY, CRRA

ON BEHALF OF
THE
RESIDENTIAL UTILITY CONSUMER OFFICE

**NOVEMBER 4, 2009** 

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### INTRODUCTION

- 2 Q. Please state your name, occupation, and business address.
  - A. My Name is William A. Rigsby. I am a Public Utilities Analyst V employed by the Residential Utility Consumer Office ("RUCO") located at 1110 W. Washington, Suite 220, Phoenix, Arizona 85007.

Q. Please describe your qualifications in the field of utilities regulation and your educational background.

A. I have been involved with utilities regulation in Arizona since 1994. During that period of time I have worked as a utilities rate analyst for both the Arizona Corporation Commission ("ACC" or "Commission") and for RUCO. I hold a Bachelor of Science degree in the field of finance from Arizona State University and a Master of Business Administration degree, with an emphasis in accounting, from the University of Phoenix. I have been awarded the professional designation, Certified Rate of Return Analyst ("CRRA") by the Society of Utility and Regulatory Financial Analysts ("SURFA"). The CRRA designation is awarded based upon experience and the successful completion of a written examination. Appendix I, which is attached to my direct testimony on the cost of capital issues in the case, further describes my educational background and also includes a list of the rate cases and regulatory matters that I have been involved with.

- Q. What is the purpose of your testimony?
- A. The purpose of my testimony is to present recommendations that are based on RUCO's analysis of Litchfield Park Service Company's ("LPSCO" or the "Company") application for a permanent rate increase ("Application) for the Company's water and wastewater operations in Maricopa County. LPSCO filed the Application with the Arizona Corporation Commission ("ACC" or "Commission") on March 6, 2009. The Company has chosen the operating period ended September 30, 2008 for the test year ("Test Year") in this proceeding.
- Q. Please explain your role in RUCO's analysis of LPSCO's Application.
- A. I reviewed LPSCO's Application and analyzed the Company's requested level of required revenue as it relates to excess capacity issues and have worked in cooperation with RUCO consultants Matthew J. Rowell and Sonn S. Rowell of Desert Analytical Services PLLC on the remaining required revenue issues. I have also filed, under separate cover, direct testimony on the cost of capital issues associated with the case.
- Q. What issues will you address in your testimony?
- A. I will address excess capacity issues associated with LPSCO's Palm Valley Water Reclamation Facility ("PVWRF").

### **SUMMARY OF TESTIMONY AND RECOMMENDATIONS**

- 2 | Q. Briefly summarize how your direct testimony is organized.
  - A. My direct testimony is organized into four sections. First, the introduction I have just presented and second, a summary of my testimony that I am about to give. Third, I will present the findings of RUCO's audit in regards to excess capacity. Fourth, I will discuss RUCO's recommendations on this specific issue.

- Q. Please summarize the recommendations and adjustments that you will address in your testimony.
- A. Based on the results of RUCO's analysis of LPSCO, RUCO is making the following recommendations:

Expansion Design Costs – RUCO is recommending that the Commission deny the inclusion of \$36,500 in rate base for design costs associated the expansion of the PVWRF.

## **EXCESS CAPACITY FINDINGS**

- Q. Has RUCO reviewed the September 30, 2008 Aquifer Protection Permit ("APP") for the PVWRF issued by ADEQ?
- A. Yes. The APP authorizes the PVWRF to operate with a capacity of 4.1 mgd (based on maximum average monthly flow.) Section 2.2.1 of the

APP also indicates that an expansion of the PVWRF to 8.2 mgd has been approved as designed.

Q. Is the Company seeking to recover costs associated with the design of the expansion of the PVWRF to an 8.2 mgd capacity?

A. Yes. Section 2.2.1 of the APP states that "A WRF<sup>[1]</sup> expansion to 8.2 mgd was designed and shall be constructed as per the design report prepared by Pacific Advanced Civil Engineers, Inc. dated August 2004." (emphasis added) Invoices from Pacific Advanced Civil Engineers, Inc. ("PACE") are included in the back-up provided by LPSCO for their 2004 and 2006 plant additions. So it is clear that the Company is attempting to add the costs

Q. Is it appropriate to add these design costs to rate base?

associated with designing the plant expansion to rate base.

A. No. This design work does not benefit current customers and is not necessary to serve current customers. Design work on the plant expansion serves only to benefit potential future customers. Therefore, these costs should be excluded from rate base.

Water Reclamation Facility

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- Q. How much did the Company spend on the design of the PVWRF expansion?
- A. The invoices relating to the plant expansion indicate that PACE charged LPSCO \$36,500 for its work on the design report. In its 6th set of data requests RUCO requested the Company disclose the total amount spent on the design work and any construction work associated therewith for the expansion of PVWRF from 4.1 mgd to 8.2 mgd. The Company objected to the relevant questions in that data request and has not provided the total amount spent on the design or construction work. In its 6<sup>th</sup> set of data request, RUCO also requested copies of any and all engineering reports associated with the expansion from 4.1mgd to 8.2 mgd. response, the Company indicated that the engineering reports, including the PACE report dated August 2004 were not in their records and thus could not be provided to RUCO.
- Q. Please summarize RUCO's rationale for the disallowance of the design costs discussed in your testimony.
- A. At a minimum, RUCO believes that the \$36,500 paid for the August 2004 PACE design report should be disallowed. Because the August 2004 report relates to the expansion of the PVWRF and the Company cannot find the design report, it is clearly not benefitting current ratepayers. RUCO also believes that any other additional sums spent on expansion of the plant from 4.1 mgd to 8.2 mgd should also be disallowed.

## **RUCO'S RECOMMENDATIONS**

- Q. What does RUCO recommend regarding the aforementioned design work costs associated with the PVWRF expansion 4.1mgd to 8.2 mgd?
- A. RUCO is recommending that the Commission deny recovery of the costs described above. RUCO believes that current customers should not be burdened with the expense of designing plant expansions, which will only benefit future customers or 100% of the risk of future development. Because LPSCO has objected to the relevant parts of our 6th set of data requests we cannot be certain what portion of the Company's plant additions are associated with the expansion design or construction work. At a minimum, we believe this is an issue that the Commission should decide. The issue should not be decided by default because LPSCO has not provided the necessary information. RUCO is therefore recommending that the Commission deny rate base treatment for the costs associated with LPSCO's expenditure on the design or construction of the expansion of the PVWRF from 4.1 mgd to 8.2 mgd.

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- Q. Has RUCO made the appropriate accounting adjustments to remove the aforementioned dollar amounts from rate base?
- A. Yes. As to those costs, which are known, I have made an adjustment in the direct testimony schedules of RUCO witness Sonn S. Rowell, removing the \$36,500 paid for the August 2004 PACE engineering design

Direct Testimony of William A. Rigsby Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104 1 report. To the extent other design or construction costs are discovered, if 2 any, RUCO will address and adjust for those dollar amounts in surrebuttal. 3 4 Q. Does your silence on any of the issues, matters or findings addressed in 5 the testimony of any of the witness for LPSCO constitute your acceptance 6 of their positions on such issues, matters or findings? 7 Α. No, it does not. 8 9 Q. Does this conclude your direct testimony on LPSCO? Yes, it does. 10 A.

# LITCHFIELD PARK SERVICE COMPANY

DOCKET NO. SW-01428A-09-0103

DOCKET NO. W-01427A-09-0104

DIRECT TESTIMONY
ON COST OF CAPITAL

OF

WILLIAM A. RIGSBY, CRRA

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

**NOVEMBER 4, 2009** 

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### INTRODUCTION

- Q. Please state your name, occupation, and business address.
  - A. My Name is William A. Rigsby. I am a Public Utilities Analyst V employed by the Residential Utility Consumer Office ("RUCO") located at 1110 W. Washington, Suite 220, Phoenix, Arizona 85007.

Q. Please describe your qualifications in the field of utilities regulation and your educational background.

A. I have been involved with utilities regulation in Arizona since 1994. During that period of time I have worked as a utilities rate analyst for both the Arizona Corporation Commission ("ACC" or "Commission") and for RUCO. I hold a Bachelor of Science degree in the field of finance from Arizona State University and a Master of Business Administration degree, with an emphasis in accounting, from the University of Phoenix. I have been awarded the professional designation, Certified Rate of Return Analyst ("CRRA") by the Society of Utility and Regulatory Financial Analysts ("SURFA"). The CRRA designation is awarded based upon experience and the successful completion of a written examination. Appendix I, which is attached to my direct testimony, further describes my educational background and also includes a list of the rate cases and regulatory matters that I have been involved with.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present recommendations that are based on my analysis of Litchfield Park Service Company's ("LPSCO" or the "Company") application for a permanent rate increase ("Application) for the Company's water and wastewater operations in Maricopa County. LPSCO filed the Application with the Arizona Corporation Commission ("ACC" or "Commission") on March 6, 2009. The Company has chosen the operating period ended September 30, 2008 for the test year ("Test Year") in this proceeding. Furthermore, LPSCO has not performed a reconstruction cost new study and has elected to treat the Company's original cost rate base as the fair value rate base in this case. Consequently there is no need to calculate a separate fair value rate of return to be applied to the Company's fair value rate base.

Q. Briefly describe LPSCO.

A. LPSCO¹ is a wholly owned subsidiary of Algonquin Water Resources of America, which is a wholly owned subsidiary of the Algonquin Power Income Fund ("Algonquin Fund" or "Parent"), a mutual fund, or trust, which is listed on the Toronto Stock Exchange (ticker symbol APF.UN). The

<sup>&</sup>lt;sup>1</sup> Based on documents provided by the Company, LPSCO officially changed its name to Liberty Water on April 27, 2009. According to the Company response to ACC Staff 's data request JMM 7.3, dated October 23, 2009, the name change was actually the registration of Litchfield Park Service Company dba Liberty Water. The holding company for LPSCO, Algonquin Water Resources of America, Inc., did actually change its name to Liberty Water Co. There was no sale of stock or assets involved. In order to maintain consistency with the Company's Application, RUCO will continue to refer to the Company as LPSCO and its holding company and parent under the Algonquin monicker.

1 Company serves customers in Litchfield Park, Avondale and parts of 2 Glendale on the west side of the Phoenix metro area. The Algonquin 3 Fund also owns and operates six other ACC regulated utilities: Black 4 Mountain Sewer Corporation, serving the Town of Carefree north of 5 Scottsdale; Gold Canyon Sewer Company, located east of Apache 6 Junction; Rio Rico Utilities, Inc., located just north of Nogales on the 7 border between Arizona and Mexico; Bella Vista Water Company. 8 Northern Sunrise Water Company and Southern Sunrise Water Company 9 located in or near Sierra Vista. The Algonquin Fund also owns Algonquin 10 Water Services, which directly oversees the daily operations of the 11 aforementioned Arizona public service companies.

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## Q. What is a mutual fund?

A. A mutual fund is a type of investment vehicle that generally provides investors with the opportunity to place their funds into a professionally managed portfolio of financial instruments such as stocks or bonds. In the case of a stock mutual fund, the fund's manager will buy and sell on the basis of how well a stock meets the fund's investment criteria, such as providing a specific level of dividend income and/or achieving projected levels of capital appreciation. Unlike the price of a stock or bond, the value of a mutual fund is expressed as its net asset value ("NAV"). Fund managers generally realize a profit from management fees, which are normally collected as a fixed percentage, typically between 0.5 percent

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Q.

management fees.

existing shares on a continual basis.

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How is the Algonquin Fund structured? The Algonquin Fund is an open-ended fund with an investment portfolio comprised of utilities involved in the production of electricity and the provision of water and wastewater services. These individual utilities make up the Algonquin Fund's Hydroelectric, Cogeneration, Alternative Fuels and Infrastructure Divisions. Instead of a collection of stocks or bonds, the fund is comprised of utilities that are bought, held and sold in the hope of achieving desired returns on investment. In this respect, the Algonquin fund is no different than a utility holding company whose shares are publicly traded in the financial markets. Shares of the funds are referred to as units and shareholders are referred to as unitholders. As I explained above, the Algonquin Fund's managers derive their income from

and 2.00 percent a year, of the fund's NAV. Management fees are

normally deducted from shareholder's assets on an annual basis. Closed-

ended funds have a fixed number of shares that are bought and sold on

securities exchanges in the same manner as individual stocks and bonds.

Open-ended funds, on the other hand, offer new shares and redeem

is engaged in land development.

during my analysis.

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- Q. Is this form of ownership common for utilities operating in Arizona?

No, most investor owned utilities operating in Arizona are either closely

held corporate entities, are owned by a utility holding company or, as in

the case of many water and wastewater utilities, are owned by a firm that

I reviewed LPSCO's Application and performed a cost of capital analysis

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- Q. Please explain your role in RUCO's analysis of LPSCO's Application.
- to determine a fair rate of return on the Company's invested capital. In addition to my recommended hypothetical capital structure, my direct testimony will present my recommended costs of common equity (LPSCO has no preferred stock) and my recommended cost of hypothetical debt. The recommendations contained in this testimony are based on information obtained from Company responses to data requests, the

Company's Application and from market-based research that I conducted

- Were you also responsible for conducting an analysis on the Company's Q. proposed revenue level, rate base and rate design?
- Α. I have filed, under separate cover, direct testimony on the excess capacity issues associated LPSCO's wastewater facilities. RUCO consultants Matthew J. Rowell and Sonn S. Rowell of Desert Mountain Analytical

Services PLLC will address those aspects of the case except for excess capacity issues.

- Q. What areas will you address in your testimony?
- 5 A. I will address the cost of capital issues associated with the case.

- Q. Please identify the exhibits that you are sponsoring.
- A. I am sponsoring Schedules WAR-1 through WAR-9.

## **SUMMARY OF TESTIMONY AND RECOMMENDATIONS**

- Q. Briefly summarize how your cost of capital testimony is organized.
- A. My cost of capital testimony is organized into six sections. First, the introduction I have just presented and second, a summary of my testimony that I am about to give. Third, I will present the findings of my cost of equity capital analysis, which utilized both the discounted cash flow ("DCF") method, and the capital asset pricing model ("CAPM"). These are the two methods that RUCO and ACC Staff have consistently used for calculating the cost of equity capital in rate case proceedings in the past, and are the methodologies that the ACC has given the most weight to in setting allowed rates of returns for utilities that operate in the Arizona jurisdiction. In this third section I will also provide a brief overview of the current economic climate within which LPSCO is operating. Fourth, I will discuss my recommended capital structure, my recommended cost of

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long-term debt and my recommended weighted average cost of capital.

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Sixth, I will comment on LPSCO's cost of capital testimony. Schedules

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WAR-1 through WAR-9 will provide support for my cost of capital analysis.

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Q. Please summarize the recommendations and adjustments that you will

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A.

Based on the results of my analysis of LPSCO, I am making the following

recommendations:

address in your testimony.

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Cost of Equity Capital – I am recommending an 8.01 percent cost of equity

capital. This 8.01 percent figure is based on the results that I obtained in

my cost of equity analysis, which employed both the DCF and CAPM

methodologies. My 8.01 percent cost of equity capital is 449 basis points

lower than the 12.50 percent cost of equity capital being proposed by the

Company.

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Capital Structure – I am recommending that the Commission adopt the

Company-proposed capital structure which is comprised of 17.83 percent

long-term debt and 82.17 percent common equity. My recommended

capital structure takes into consideration the Company's actual third party

debt which eliminated the need for a hypothetical capital structure in this

particular case.

Α.

Cost of Long-Term Debt – I am recommending that the Commission adopt the Company-proposed cost of long-term debt of 6.39 percent, which is the weighted average cost of LPSCO's two industrial development authority bond issuances which were used to finance utility plant in service.

Weighted Average Cost of Capital - Based on the results of my

recommended capital structure, I am recommending a 7.72 percent cost

of capital for LPSCO, which is the weighted cost of my recommended

costs of long-term debt and common equity. My 8.01 percent weighted

average cost of capital is 369 basis points lower than the Company-

proposed 11.41 percent weighted cost of capital.

Q. Why do you believe that your recommended 7.72 percent weighted average cost of capital is an appropriate rate of return for LPSCO to earn on its invested capital?

The 7.72 percent weighted average cost of capital figure that I am recommending meets the criteria established in the landmark Supreme Court cases of <u>Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia</u> (262 U.S. 679, 1923) and <u>Federal Power Commission v. Hope Natural Gas Company</u> (320 U.S. 391, 1944). Simply stated, these two cases affirmed that a public utility that is efficiently and economically managed is entitled to a return on investment

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that instills confidence in its financial soundness, allows the utility to attract capital, and also allows the utility to perform its duty to provide service to ratepavers. The rate of return adopted for the utility should also be comparable to a return that investors would expect to receive from investments with similar risk.

The Hope decision allows for the rate of return to cover both the operating expenses and the "capital costs of the business" which includes interest on debt and dividend payment to shareholders. This is predicated on the belief that, in the long run, a company that cannot meet its debt obligations and provide its shareholders with an adequate rate of return will not continue to supply adequate public utility service to ratepayers.

Do the Bluefield and Hope decisions indicate that a rate of return sufficient Q. to cover all operating and capital costs is guaranteed?

No. Neither case guarantees a rate of return on utility investment. What the Bluefield and Hope decisions do allow, is for a utility to be provided with the opportunity to earn a reasonable rate of return on its investment. That is to say that a utility, such as LPSCO, is provided with the opportunity to earn an appropriate rate of return if the Company's management exercises good judgment and manages its assets and resources in a manner that is both prudent and economically efficient.

### **COST OF EQUITY CAPITAL**

- Q. What is your final recommended cost of equity capital for LPSCO?
- A. I am recommending a cost of equity of 8.01 percent. My recommended 8.01 percent cost of equity figure is the mean average of the results of my DCF and CAPM analyses, which utilized both a sample of publicly traded water providers and a sample of publicly traded natural gas local distribution companies ("LDC"). This calculation is exhibited on page 3 of my Schedule WAR-1.

## **Discounted Cash Flow (DCF) Method**

- Q. Please explain the DCF method that you used to estimate LPSCO's cost of equity capital.
- A. The DCF method employs a stock valuation model known as the constant growth valuation model, that bears the name of Dr. Myron J. Gordon (i.e. the Gordon model), the professor of finance who was responsible for its development. Simply stated, the DCF model is based on the premise that the current price of a given share of common stock is determined by the present value of all of the future cash flows that will be generated by that share of common stock. The rate that is used to discount these cash flows back to their present value is often referred to as the investor's cost of capital (i.e. the cost at which an investor is willing to forego other investments in favor of the one that he or she has chosen).

Another way of looking at the investor's cost of capital is to consider it from the standpoint of a company that is offering its shares of stock to the investing public. In order to raise capital, through the sale of common stock, a company must provide a required rate of return on its stock that will attract investors to commit funds to that particular investment. In this respect, the terms "cost of capital" and "investor's required return" are one in the same. For common stock, this required return is a function of the dividend that is paid on the stock. The investor's required rate of return can be expressed as the percentage of the dividend that is paid on the stock (dividend yield) plus an expected rate of future dividend growth. This is illustrated in mathematical terms by the following formula:

$$k = \frac{D_1}{P_0} + g$$

where: k = the required return (cost of equity, equity capitalization rate),

 $\frac{D_1}{P_0}$  = the dividend yield of a given share of stock calculated by dividing the expected dividend by the current market price of the given share of stock, and

g = the expected rate of future dividend growth

This formula is the basis for the standard growth valuation model that I used to determine LPSCO' cost of equity capital.

- 1 Q. In determining the rate of future dividend growth for LPSCO, what assumptions did you make?
  - A. There are two primary assumptions regarding dividend growth that must be made when using the DCF method. First, dividends will grow by a constant rate into perpetuity, and second, the dividend payout ratio will remain at a constant rate. Both of these assumptions are predicated on the traditional DCF model's basic underlying assumption that a company's earnings, dividends, book value and share growth all increase at the same constant rate of growth into infinity. Given these assumptions, if the dividend payout ratio remains constant, so does the earnings retention ratio (the percentage of earnings that are retained by the company as opposed to being paid out in dividends). This being the case, a company's dividend growth can be measured by multiplying its retention ratio (1 dividend payout ratio) by its book return on equity. This can be stated as q = b x r.
  - Q. Would you please provide an example that will illustrate the relationship that earnings, the dividend payout ratio and book value have with dividend growth?
  - A. RUCO consultant Stephen Hill illustrated this relationship in a Citizens

    Utilities Company 1993 rate case by using a hypothetical utility.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Citizens Utilities Company, Arizona Gas Division, Docket No. E-1032-93-111, Prepared Testimony, dated December 10, 1993, p. 25.

Table I

	Year 1	Year 2	Year 3	Year 4	Year 5	Growth
Book Value	\$10.00	\$10.40	\$10.82	\$11.25	\$11.70	4.00%
Equity Return	10%	10%	10%	10%	10%	N/A
Earnings/Sh.	\$1.00	\$1.04	\$1.082	\$1.125	\$1.170	4.00%
Payout Ratio	0.60	0.60	0.60	0.60	0.60	N/A
Dividend/Sh	\$0.60	\$0.624	\$0.649	\$0.675	\$0.702	4.00%

Table I of Mr. Hill's illustration presents data for a five-year period on his hypothetical utility. In Year 1, the utility had a common equity or book value of \$10.00 per share, an investor-expected equity return of ten percent, and a dividend payout ratio of sixty percent. This results in earnings per share of \$1.00 (\$10.00 book value x 10 percent equity return) and a dividend of \$0.60 (\$1.00 earnings/sh. x 0.60 payout ratio) during Year 1. Because forty percent (1 - 0.60 payout ratio) of the utility's earnings are retained as opposed to being paid out to investors, book value increases to \$10.40 in Year 2 of Mr. Hill's illustration. Table I presents the results of this continuing scenario over the remaining five-year period.

The results displayed in Table I demonstrate that under "steady-state" (i.e. constant) conditions, book value, earnings and dividends all grow at the same constant rate. The table further illustrates that the dividend growth rate, as discussed earlier, is a function of (1) the internally generated funds or earnings that are retained by a company to become new equity,

1 2 and (2) the return that an investor earns on that new equity. The DCF dividend growth rate, expressed as g = b x r, is also referred to as the internal or sustainable growth rate.

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Q. If earnings and dividends both grow at the same rate as book value. shouldn't that rate be the sole factor in determining the DCF growth rate?

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A.

No. Possible changes in the expected rate of return on either common equity or the dividend payout ratio make earnings and dividend growth by themselves unreliable. This can be seen in the continuation of Mr. Hill's illustration on a hypothetical utility.

Table II

15%

0.60

\$0.974

Year 4

\$11.47

15%

\$1.720

0.60

\$1.032

Year 5

\$12.158

15%

\$1.824

\$1.094

0.60

Growth

5.00%

10.67%

16.20%

N/A

16.20%

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12 Year 1 Year 3 Year 2 13 **Book Value** \$10.00 \$10.40 \$10.82 14 10% 10% **Equity Return** 15 \$1.00 \$1.04 \$1.623 Earnings/Sh 16 Payout Ratio 0.60 0.60

\$0.60

\$0.624

Dividend/Sh

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In the example displayed in Table II, a sustainable growth rate of four percent<sup>3</sup> exists in Year 1 and Year 2 (as in the prior example). In Year 3, Year 4 and Year 5, however, the sustainable growth rate increases to six

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<sup>[(</sup>Year 2 Earnings/Sh - Year 1 Earnings/Sh) ÷ Year 1 Earnings/Sh] = [(\$1.04 - \$1.00) ÷  $1.00 = [0.04 \div 1.00] = 4.00\%$ 

percent.<sup>4</sup> If the hypothetical utility in Mr. Hill's illustration were expected to earn a fifteen-percent return on common equity on a continuing basis, then a six percent long-term rate of growth would be reasonable. However, the compound growth rate for earnings and dividends, displayed in the last column, is 16.20 percent. If this rate was to be used in the DCF model, the utility's return on common equity would be expected to increase by fifty percent every five years, [(15 percent ÷ 10 percent) – 1]. This is clearly an unrealistic expectation.

Although it is not illustrated in Mr. Hill's hypothetical example, a change in only the dividend payout ratio will eventually result in a utility paying out more in dividends than it earns. While it is not uncommon for a utility in the real world to have a dividend payout ratio that exceeds one hundred percent on occasion, it would be unrealistic to expect the practice to continue over a sustained long-term period of time.

- Q. Other than the retention of internally generated funds, as illustrated in Mr. Hill's hypothetical example, are there any other sources of new equity capital that can influence an investor's growth expectations for a given company?
- A. Yes, a company can raise new equity capital externally. The best example of external funding would be the sale of new shares of common stock. This would create additional equity for the issuer and is often the

<sup>&</sup>lt;sup>4</sup> [ (1 – Payout Ratio) x Rate of Return] = [ (1 - 0.60) x 15.00%] =  $0.40 \times 15.00\% = 6.00\%$ 

case with utilities that are either in the process of acquiring smaller systems or providing service to rapidly growing areas.

- Q. How does external equity financing influence the growth expectations held by investors?
- A. Rational investors will put their available funds into investments that will either meet or exceed their given cost of capital (i.e. the return earned on their investment). In the case of a utility, the book value of a company's stock usually mirrors the equity portion of its rate base (the utility's earning base). Because regulators allow utilities the opportunity to earn a reasonable rate of return on rate base, an investor would take into consideration the effect that a change in book value would have on the rate of return that he or she would expect the utility to earn. If an investor believes that a utility's book value (i.e. the utility's earning base) will increase, then he or she would expect the return on the utility's common stock to increase. If this positive trend in book value continues over an extended period of time, an investor would have a reasonable expectation for sustained long-term growth.

Q. Please provide an example of how external financing affects a utility's book value of equity.

A. As I explained earlier, one way that a utility can increase its equity is by selling new shares of common stock on the open market. If these new

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shares are purchased at prices that are higher than those shares sold previously, the utility's book value per share will increase in value. This would increase both the earnings base of the utility and the earnings expectations of investors. However, if new shares sold at a price below the pre-sale book value per share, the after-sale book value per share declines in value. If this downward trend continues over time, investors might view this as a decline in the utility's sustainable growth rate and will have lower expectations regarding growth. Using this same logic, if a new stock issue sells at a price per share that is the same as the pre-sale book value per share, there would be no impact on either the utility's earnings base or investor expectations.

- Q. Please explain how the external component of the DCF growth rate is determined.
- A. In his book, The Cost of Capital to a Public Utility,<sup>5</sup> Dr. Gordon (the individual responsible for the development of the DCF or constant growth model) identified a growth rate that includes both expected internal and external financing components. The mathematical expression for Dr. Gordon's growth rate is as follows:

<sup>&</sup>lt;sup>5</sup> Gordon, M.J., <u>The Cost of Capital to a Public Utility</u>, East Lansing, MI: Michigan State University, 1974, pp. 30-33.

1					g = ( br ) + ( sv )
2		where:	g	=	DCF expected growth rate,
3			b	=	the earnings retention ratio,
4			r	=	the return on common equity,
5			s	=	the fraction of new common stock sold that
6					accrues to a current shareholder, and
7			٧	=	funds raised from the sale of stock as a fraction
8					of existing equity.
9		and	٧	=	1 - [ ( BV ) ÷ ( MP ) ]
10		where:	BV	=	book value per share of common stock, and
11			MP	=	the market price per share of common stock.
12					
13	Q.	Did you include the effect of external equity financing on long-term growth			
14		rate expectations in your analysis of expected dividend growth for the DCF			
15		model?			
16	A. Yes. The external growth rate estimate (sv) is displayed on Page 1 of				
17	Schedule WAR-4, where it is added to the internal growth rate estimate				
18	(br) to arrive at a final sustainable growth rate estimate.				
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- Q. Please explain why your calculation of external growth on page 2 of Schedule WAR-4, is the current market-to-book ratio averaged with 1.0 in the equation  $[(M \div B) + 1] \div 2$ .
- A. The market price of a utility's common stock will tend to move toward book value, or a market-to-book ratio of 1.0, if regulators allow a rate of return that is equal to the cost of capital (one of the desired effects of regulation).

  As a result of this situation, I used [(M ÷ B) + 1] ÷ 2 as opposed to the current market-to-book ratio by itself to represent investor's expectations that, in the future, a given utility will achieve a market-to-book ratio of 1.0.
- Q. Has the Commission ever adopted a cost of capital estimate that included this assumption?
- A. Yes. In a prior Southwest Gas Corporation rate case<sup>6</sup>, the Commission adopted the recommendations of ACC Staff's cost of capital witness, Stephen Hill, who I noted earlier in my testimony. In that case, Mr. Hill used the same methods that I have used in arriving at the inputs for the DCF model. His final recommendation for Southwest Gas Corporation was largely based on the results of his DCF analysis, which incorporated the same valid market-to-book ratio assumption that I have used consistently in the DCF model as a cost of capital witness for RUCO.

<sup>&</sup>lt;sup>6</sup> Decision No. 68487, Dated February 23, 2006 (Docket No. G-01551A-04-0876)

- 1 Q. How did you develop your dividend growth rate estimate?
  - A. I analyzed data on two separate proxy groups. A water company proxy group comprised of three publicly traded water companies and a natural gas proxy group consisting of ten natural gas local distribution companies ("LDC") that have similar operating characteristics to water providers.

Q. Why did you use a proxy group methodology as opposed to a direct analysis of LPSCO?

- A. One of the problems in performing this type of analysis is that the utility applying for a rate increase is not always a publicly traded company, as is the case with LPSCO itself. Consequently it was necessary to create a proxy by analyzing publicly traded water companies and LDC's with similar risk characteristics.
- Q. In determining your dividend growth rate estimates, both you and the Company's witness analyzed the data on publicly traded water utilities.
  Why did you and the Company witness analyze only publicly traded water utilities as opposed to firms that provide wastewater service?
- A. The use of water utilities was necessitated by the fact that there is a lack of financial and market information available on stand-alone wastewater utilities. This in itself is not a problem, given the fact that both water and wastewater utilities share similar risk characteristics. Both types of utilities

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provide a basic service for which there are no substitutes and are also subject to strict federal and state regulations.

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Are there any other advantages to the use of a proxy?

Α. Yes. As I noted earlier, the U.S. Supreme Court ruled in the Hope decision that a utility is entitled to earn a rate of return that is commensurate with the returns on investments of other firms with comparable risk. The proxy technique that I have used derives that rate of return. One other advantage to using a sample of companies is that it reduces the possible impact that any undetected biases, anomalies, or measurement errors may have on the DCF growth estimate.

- What criteria did you use in selecting the companies that make up your water company proxy for LPSCO?
- Α. Three of the four water companies used in the proxy are publicly traded on the New York Stock Exchange ("NYSE") and one of them, Southwest Water Company, is traded over the counter through the National Association of Securities Dealers Automated Quotation System ("NASDAQ"). All four water companies are followed by The Value Line Investment Survey ("Value Line") and are the same companies that comprise Value Line's large capitalization Water Utility Industry segment of the U.S. economy (Attachment A contains Value Line's October 23,

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- Q. Briefly describe the areas served by the companies in your water company sample proxy.
- A. In addition to providing water service to residents of Fountain Hills, Arizona through its wholly owned subsidiary Chaparral City Water Company, AWR also serves communities located in Los Angeles, Orange and San Bernardino counties in California. CWT provides service to customers in seventy-five communities in California, New Mexico and

Washington. CWT's principal service areas are located in the San Francisco Bay area, the Sacramento, Salinas and San Joaquin Valleys and parts of Los Angeles. SWWC owns and manages regulated systems in California, New Mexico, Oklahoma and Texas. WTR is a holding company for a large number of water and wastewater utilities operating in nine different states including Pennsylvania, Ohio, New Jersey, Illinois, Maine, North Carolina, Texas, Florida and Kentucky.

- Q. Are these the same water companies that LPSCO used in its application?
- A. LPSCO's cost of equity witness, Mr. Thomas J. Bourassa, used all of the water companies included in my water proxy with the exception of SWWC.
   Mr. Bourassa also used three other water companies in his cost of capital analysis<sup>7</sup> which are included in Value Line's Small and Mid Cap Edition.
- Q. Why did you exclude the water companies that are followed in Value Line's Small and Mid Cap Edition?
- A. Value Line does not provide the same type of forward-looking information (i.e. long-term estimates on return on common equity and share growth) on small and mid-cap companies that it provides on the three water companies that I used in my proxy. Consequently, as in the case of

<sup>&</sup>lt;sup>7</sup> Connecticut Water Service, Inc., Middlesex Water Company and SJW Corp.

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Southwest Water Company, these water providers are not as suitable as the ones that I have used in my analysis.

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- Q. What criteria did you use in selecting the natural gas LDC's included in your proxy for LPSCO?
- A. As are the water companies that I just described, each of the natural gas LDC's used in the proxy are publicly traded on a major stock exchange (all ten trade on the NYSE) and are followed by Value Line. Each of the ten LDC's in my sample are tracked in Value Line's natural gas Utility industry segment. All of the companies in the proxy are engaged in the provision of regulated natural gas distribution services. Attachment B of my testimony contains Value Line's most recent evaluation of the natural gas proxy group that I used for my cost of common equity analysis.

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Q. What companies are included your natural gas proxy?

A. The ten natural gas LDC's included in my proxy (and their NYSE ticker symbols) are AGL Resources, Inc. ("AGL"), Atmos Energy Corp. ("ATO"),
Laclede Group, Inc. ("LG"), New Jersey Resources Corporation ("NJR"),
Nicor, Inc. ("GAS"), Northwest Natural Gas Co. ("NWN"), Piedmont
Natural Gas Company ("PNY"), South Jersey Industries, Inc. ("SJI")
Southwest Gas Corporation ("SWX"), which is the dominant natural gas provider in Arizona, and WGL Holdings, Inc. ("WGL"). These are the

same ten LDC's that I analyzed in the most recent UNS Gas, Inc. proceeding.8

Q. Briefly describe the regions of the U.S. served by the ten natural gas LDC's that make up your sample proxy.

A. The ten LDC's listed above provide natural gas service to customers in the Middle Atlantic region (i.e. NJI which serves portions of northern New Jersey, SJI which serves southern New Jersey and WGL which serves the Washington D.C. metro area), the Southeast and South Central portions of the U.S. (i.e. AGL which serves Virginia, southern Tennessee and the Atlanta, Georgia area and PNY which serves customers in North Carolina, South Carolina and Tennessee), the South, deep South and Midwest (i.e. ATO which serves customers in Kentucky, Mississippi, Louisiana, Texas, Colorado and Kansas, GAS which provides service to northern and

16 Northwest (i.e. NWN which serves Washington state and Oregon).

western Illinois, and LG which serves the St. Louis area), and the Pacific

Portions of Arizona, Nevada and California are served by SWX.

Q. Did the Company's witness also perform a similar analysis using natural gas LDC's?

A. No, he did not.

<sup>&</sup>lt;sup>8</sup> Docket No. G-04204A-08-0571

- Q. Please explain your DCF growth rate calculations for the sample companies used in your proxy.

Α.

- A. Schedule WAR-5 provides retention ratios, returns on book equity, internal growth rates, book values per share, numbers of shares outstanding, and the compounded share growth for each of the utilities included in the sample for the historical observation period 2004 to 2008 for both the water and LDC industries. Schedule WAR-5 also includes Value Line's projected 2009, 2010 and 2012-14 values for the retention ratio, equity return, book value per share growth rate, and number of shares outstanding for both the water utilities and the LDC's.
- Q. Please describe how you used the information displayed in Schedule
  - In explaining my analysis, I will use AWR as an example. The first

WAR-5 to estimate each comparable utility's dividend growth rate.

dividend growth component that I evaluated was the internal growth rate. I used the "b x r" formula (described on pages 12 and 13) to multiply AWR's earned return on common equity by its earnings retention ratio for each year in the 2004 to 2008 observation period to derive the utility's annual internal growth rates. I used the mean average of this five-year period as a benchmark against which I compared the projected growth rate trends provided by Value Line. Because an investor is more likely to be influenced by recent growth trends, as opposed to historical averages,

the five-year mean noted earlier was used only as a benchmark figure. As

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shown on Schedule WAR-5, Page 1, AWR's average internal growth rate of 2.62% over the 2004 to 2008 period reflects an up and down pattern of growth that ranged from a low of 1.01% in 2002 to a high of 3.79% during 2007. Value Line is predicting that growth will increase steadily from 3.05% in 2008, to 6.23% by the end of the 2012-14 time frame. After weighing Value Line's projections for internal growth, stable outlook for earnings per share, increased growth for dividends per share and no change in book value per share growth, I believe that a 6.20% rate of internal growth is reasonable for AWR. (Schedule WAR-4, Page 1 of 2).

- Please continue with the external growth rate component portion of your analysis.
- A. Schedule WAR-5 demonstrates that the pattern of shares outstanding for AWR increased from 16.75 million to 17.30 million from 2004 to 2008. Value Line is predicting that this level will increase from 18.50 million in 2009 to 20.00 million by the end of 2014. Based on this data, I believe that a 5.00 percent growth in shares is not unreasonable for AWR (Page 2 of Schedule WAR-4). My final dividend growth rate estimate for AWR is 9.03 percent (6.20 percent internal + 2.83 percent external) and is shown on Page 1 of Schedule WAR-4.

Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104 1 Q. What is your average DCF dividend growth rate estimate for your sample 2 of water utilities? 3 A. My average DCF dividend growth rate estimate for my water company 4 sample is 7.18 percent as displayed on page 1 of Schedule WAR-4. 5 6 Q. Did you use the same approach to determine an average dividend growth 7 rate for the proxy comprised of natural gas LDC's? 8 A. Yes. 9 Q. What is your average DCF dividend growth rate estimate for the sample 10 11 natural gas utilities? 12 My average DCF dividend growth rate estimate is 5.23 percent, which is 13 also displayed on page 1 of Schedule WAR-4. 14 15 Q. How does your average dividend growth rate estimates on water 16 companies compare to the growth rate data published by Value Line and 17 other analysts? 18 Schedule WAR-6 compares my sustainable growth estimates with the Α. five-year projections of analysts at both Zacks Investment Research, Inc. 19 20 ("Zacks") (Attachment C) and Value Line. In the case of the water 21 companies, my 7.18 percent estimate exceeds Zacks' average long-term 22 EPS projection of 6.57 percent and Value Line's growth projection of 3.74

Direct Testimony of William A. Rigsby

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percent (which is an average of EPS, DPS and BVPS). My 7.18 percent

estimate is 313 basis points higher than the 4.05 percent average of Value Line's historical and projected data averaged with the consensus opinions published by Zacks. My 7.18 percent growth estimate is also 595 basis points higher than Value Line's 1.23 percent 5-year compound historical average of EPS, DPS and BVPS. The estimates of analysts at Value Line indicate that investors are expecting somewhat higher performance from the water utility industry in the future given their 7.00 percent to 7.50 percent book return on common equity over the 2009 to 2014 period. On balance, I would say my 7.18 percent estimate is an optimistic representation of the growth projections that are available to the investing public.

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Q. How do your average dividend growth rate estimates on natural gas LDC's compare to the growth rate data published by Value Line and other analysts?

projections published by Zacks, and 85 basis points higher than the 4.38 percent Value Line projected estimate (which is an average of EPS, DPS

and BVPS). As can also be seen on Schedule WAR-6, the 5.23 percent

In regard to the natural gas LDC's, my 5.23 percent estimate is 57 basis

points lower than the average 5.80 percent long-term EPS consensus

estimate that I have calculated is 54 basis points lower than the 5.77

percent average of the 5-year historic EPS, DPS and BVPS means of Value Line and 13 basis points lower than the 5.36 percent five-year

Α.

compound historical average of Value Line data (on EPS, DPS and BVPS). In fact, my 5.23 percent estimate is 7 basis points higher than the combined 5.16 percent Value Line and Zacks averages displayed in Schedule WAR-6. In the case of the LDC's I would say that my 5.23 percent estimate, which is lower than Zack's but higher than Value Line's forecasts, is a fairly good representation of the growth projections presented by securities analysts at this point in time.

Q. How did you calculate the dividend yields displayed in Schedule WAR-3?

For both the water companies and the natural gas LDC's I used the estimated annual dividends, for the next twelve-month period, that appeared in Value Line's October 23, 2009 Ratings and Reports water utility industry update and Value Line's September 11, 2009 Ratings and Reports natural gas utility update. I then divided those figures by the eight-week average closing price per share of the appropriate utility's common stock. The eight-week average price is based on the daily adjusted closing stock prices for each of the companies in my proxies for the period August 24, 2009 to October 16, 2009.

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- Based on the results of your DCF analysis, what is your cost of equity 2 capital estimate for the water and natural gas utilities included in your 3 sample?
  - Α. As shown on Schedule WAR-2, the cost of equity capital derived from my DCF analysis is 9.94 percent for the water utilities and 9.50 percent for the natural gas LDC's.

## Capital Asset Pricing Model (CAPM) Method

- Please explain the theory behind CAPM and why you decided to use it as Q. an equity capital valuation method in this proceeding.
- CAPM is a mathematical tool that was developed during the early 1960's Α. by William F. Sharpe<sup>9</sup>, the Timken Professor Emeritus of Finance at Stanford University, who shared the 1990 Nobel Prize in Economics for research that eventually resulted in the CAPM model. CAPM is used to analyze the relationships between rates of return on various assets and risk as measured by beta. 10 In this regard, CAPM can help an investor to determine how much risk is associated with a given investment so that he or she can decide if that investment meets their individual preferences.

<sup>&</sup>lt;sup>9</sup> William F. Sharpe, "A Simplified Model of Portfolio Analysis," Management Science, Vol. 9, No. 2 (January 1963), pp. 277-93.

<sup>&</sup>lt;sup>10</sup> Beta is defined as an index of volatility, or risk, in the return of an asset relative to the return of a market portfolio of assets. It is a measure of systematic or non-diversifiable risk. The returns on a stock with a beta of 1.0 will mirror the returns of the overall stock market. The returns on stocks with betas greater than 1.0 are more volatile or riskier than those of the overall stock market; and if a stock's beta is less than 1.0, its returns are less volatile or riskier than the overall stock market.

Finance theory has always held that as the risk associated with a given investment increases, so should the expected rate of return on that investment and vice versa. According to CAPM theory, risk can be classified into two specific forms: nonsystematic or diversifiable risk, and systematic or non-diversifiable risk. While nonsystematic risk can be virtually eliminated through diversification (i.e. by including stocks of various companies in various industries in a portfolio of securities), systematic risk, on the other hand, cannot be eliminated by diversification. Thus, systematic risk is the only risk of importance to investors. Simply stated, the underlying theory behind CAPM states that the expected return on a given investment is the sum of a risk-free rate of return plus a market risk premium that is proportional to the systematic (non-diversifiable risk) associated with that investment. In mathematical terms, the formula is as follows:

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<u> </u>	† '	13	lm	- r <sub>f</sub> ) ]	

where: k = the expected return of a given security,

r<sub>f</sub> = risk-free rate of return,

ß = beta coefficient, a statistical measurement of a

security's systematic risk,

r<sub>m</sub> = average market return (e.g. S&P 500), and

 $r_m - r_f = market risk premium.$ 

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- Q. What types of financial instruments are generally used as a proxy for the risk-free rate of return in the CAPM model?
  - A. Generally speaking, the yields of U.S. Treasury instruments are used by analysts as a proxy for the risk-free rate of return component.
  - Q. Please explain why U.S. Treasury instruments are regarded as a suitable proxy for the risk-free rate of return?
  - Α. As citizens and investors, we would like to believe that U.S. Treasury securities (which are backed by the full faith and credit of the United States Government) pose no threat of default no matter what their maturity dates are. However, a comparison of various Treasury instruments will reveal that those with longer maturity dates do have slightly higher yields. Treasury yields are comprised of two separate components. 11 a real rate of interest (believed to be approximately 2.00 percent) and an inflationary expectation. When the real rate of interest is subtracted from the total treasury yield, all that remains is the inflationary expectation. Because increased inflation represents a potential capital loss, or risk, to investors, a higher inflationary expectation by itself represents a degree of risk to an Another way of looking at this is from an opportunity cost investor. When an investor locks up funds in long-term T-Bonds, standpoint.

<sup>&</sup>lt;sup>11</sup> As a general rule of thumb, there are three components that make up a given interest rate or rate of return on a security: the real rate of interest, an inflationary expectation, and a risk premium. The approximate risk premium of a given security can be determined by simply subtracting a 91-day T-Bill rate from the yield on the security.

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compensation must be provided for future investment opportunities foregone. This is often described as maturity or interest rate risk and it can affect an investor adversely if market rates increase before the instrument matures (a rise in interest rates would decrease the value of the debt instrument). As discussed earlier in the DCF portion of my testimony, this compensation translates into higher rates of returns to the investor.

- Q. What security did you use for a risk-free rate of return in your CAPM analysis?
- A. I used an eight-week average of the yield on a 5-year U.S. Treasury instrument. The yields were published in Value Line's Selection and Opinion publication dated September 4, 2009 through October 23, 2009 (Attachment D). This resulted in a risk-free (r<sub>f</sub>) rate of return of 2.46 percent.
- Q. Why did you use the yield on a 5-year year U.S. Treasury instrument as opposed to a short-term T-Bill?
- A. While a shorter term instrument, such as a 91-day T-Bill, presents the lowest possible total risk to an investor, a good argument can be made that the yield on an instrument that matches the investment period of the asset being analyzed in the CAPM model should be used as the risk-free rate of return. Since utilities in Arizona generally file for rates every three

to five years, the yield on a 5-year U.S. Treasury Instrument closely matches the investment period or, in the case of regulated utilities, the period that new rates will be in effect.

Q. How did you calculate the market risk premium used in your CAPM analysis?

A. I used both a geometric and an arithmetic mean of the historical total returns on the S&P 500 index from 1926 to 2008 as the proxy for the market rate of return  $(r_m)$ . For the risk-free portion of the risk premium component  $(r_f)$ , I used the geometric mean of the total returns of intermediate-term government bonds for the same eighty-two year period. The market risk premium  $(r_m - r_f)$  that results by using the geometric mean of these inputs is 4.20 percent (9.60% - 5.40% = 4.20%). The market risk premium that results by using the arithmetic mean calculation is 6.10 percent (11.70% - 5.60% = 6.10%).

Q. How did you select the beta coefficients that were used in your CAPM analysis?

Α.

The beta coefficients (ß), for the individual utilities used in both my proxies, were calculated by Value Line and were current as of October 23, 2009 for the water companies and September 11, 2009 for the natural gas LDC's. Value Line calculates its betas by using a regression analysis between weekly percentage changes in the market price of the security

being analyzed and weekly percentage changes in the NYSE Composite Index over a five-year period. The betas are then adjusted by Value Line for their long-term tendency to converge toward 1.00. The beta coefficients for the service providers included in my water company sample ranged from 0.65 to 1.10 with an average beta of 0.83. The beta coefficients for the LDC's included in my natural gas sample ranged from 0.60 to 0.75 with an average beta of 0.67.

Q. What are the results of your CAPM analysis?

- A. As shown on pages 1 and 2 of Schedule WAR-7, my CAPM calculation using a geometric mean to calculate the risk premium results in an average expected return of 5.92 percent for the water companies and 5.25 percent for the natural gas LDC's. My calculation using an arithmetic mean results in an average expected return of 7.49 percent for the water companies and 6.51 percent for the natural gas LDC's.
- Q. Please summarize the results derived under each of the methodologies presented in your testimony.
- A. The following is a summary of the cost of equity capital derived under each methodology used:

1			METHOD	RESULTS			
2			DCF (Water Sample)	9.94%			
3			DCF (Natural Gas Sample)	9.50%			
4			CAPM (Water Sample)	5.92% - 7.49%			
5			CAPM (Natural Gas)	5.25% - 6.51%			
6							
7		Based on th	ese results, my best estimate	of an appropriate range for a			
8		cost of common equity for LPSCO is 5.25 percent to 9.94 percent. My					
9		final recommended cost of common equity figure is 8.01 percent.					
10							
11	Q	How did you arrive at your final recommended 8.01 percent cost of					
12		common equ	uity?				
13	A.	My recommended 8.01 percent cost of common equity is the mean					
14		average of	my DCF and CAPM results.	The calculation of my 8.01			
15		percent cost	of common equity can be seen	on Schedule WAR-1, Page 2			
16		of 2.					
17							
18	Q.	How does yo	our recommended cost of equity	capital compare with the cost			
19		of equity cap	ital proposed by the Company?				
20	A.	The 12.50 p	ercent cost of equity capital pro	posed by the Company is 449			
21		basis points	higher than the 8.01 percent O	CRB cost of equity capital that			
22		I am recomm	nending.				
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### **Current Economic Environment**

- Q. Please explain why it is necessary to consider the current economic environment when performing a cost of equity capital analysis for a regulated utility.
- A. Consideration of the economic environment is necessary because trends in interest rates, present and projected levels of inflation, and the overall state of the U.S. economy determine the rates of return that investors earn on their invested funds. Each of these factors represent potential risks that must be weighed when estimating the cost of equity capital for a regulated utility and are, most often, the same factors considered by individuals who are also investing in non-regulated entities.
- Q. Please discuss your analysis of the current economic environment.
- A. My analysis includes a brief review of the economic events that have occurred since 1990. Schedule WAR-8 displays various economic indicators and other data that I will refer to during this portion of my testimony.
  - In 1991, as measured by the most recently revised annual change in gross domestic product ("GDP"), the U.S. economy experienced a rate of growth of negative 0.20 percent. This decline in GDP marked the beginning of a mild recession that ended sometime before the end of the first half of 1992. Reacting to this situation, the Federal Reserve Board

("Federal Reserve" or "Fed"), then chaired by noted economist Alan Greenspan, lowered its benchmark federal funds rate<sup>12</sup> in an effort to further loosen monetary constraints - an action that resulted in lower interest rates.

During this same period, the nation's major money center banks followed the Federal Reserve's lead and began lowering their interest rates as well. By the end of the fourth quarter of 1993, the prime rate (the rate charged by banks to their best customers) had dropped to 6.00 percent from a 1990 level of 10.01 percent. In addition, the Federal Reserve's discount rate on loans to its member banks had fallen to 3.00 percent and short-term interest rates had declined to levels that had not been seen since 1972.

Although GDP increased in 1992 and 1993, the Federal Reserve took steps to increase interest rates beginning in February of 1994, in order to keep inflation under control. By the end of 1995, the Federal discount rate had risen to 5.21 percent. Once again, the banking community followed the Federal Reserve's moves. The Fed's strategy, during this period, was to engineer a "soft landing." That is to say that the Federal Reserve wanted to foster a situation in which economic growth would be stabilized without incurring either a prolonged recession or runaway inflation.

<sup>&</sup>lt;sup>12</sup> This is the interest rate charged by banks with excess reserves at a Federal Reserve district bank to banks needing overnight loans to meet reserve requirements. The federal funds rate is the most sensitive indicator of the direction of interest rates, since it is set daily by the market, unlike the prime rate and the discount rate, which are periodically changed by banks and by the Federal Reserve Board, respectively.

- 1 Q. Did the Federal Reserve achieve its goals during this period?
  - A. Yes. The Fed's strategy of decreasing interest rates to stimulate the economy worked. The annual change in GDP began an upward trend in 1992. A change of 4.50 percent and 4.20 percent were recorded at the end of 1997 and 1998 respectively. Based on daily reports that were presented in the mainstream print and broadcast media during most of 1999, there appeared to be little doubt among both economists and the public at large that the U.S. was experiencing a period of robust economic growth highlighted by low rates of unemployment and inflation. Investors, who believed that technology stocks and Internet company start-ups (with little or no history of earnings) had high growth potential, purchased these types of issues with enthusiasm. These types of investors, who exhibited what former Chairman Greenspan described as "irrational exuberance," pushed stock prices and market indexes to all time highs from 1997 to 2000.

Q. What has been the state of the economy since 2001?

A. The U.S. economy entered into a recession near the end of the first quarter of 2001. The bullish trend, which had characterized the last half of the 1990's, had already run its course sometime during the third quarter of 2000. Economic data released since the beginning of 2001 had already been disappointing during the months preceding the September 11, 2001 terrorist attacks on the World Trade Center and the Pentagon. Slower

growth figures, rising layoffs in the high technology manufacturing sector, and falling equity prices (due to lower earnings expectations) prompted the Fed to begin cutting interest rates as it had done in the early 1990's. The now infamous terrorist attacks on New York City and Washington D.C. marked a defining point in this economic slump and prompted the Federal Reserve to continue its rate cutting actions through December 2001. Prior to the 9/11 attacks, commentators, reporting in both the mainstream financial press and various economic publications including Value Line, believed that the Federal Reserve was cutting rates in the hope of avoiding a recession.

Despite several intervals during 2002 and 2003 in which the Federal Open Market Committee ("FOMC") decided not to change interest rates – moves which indicated that the worst may be over and that the recession might have bottomed out during the last quarter of 2001 – a lackluster economy persisted. The continuing economic malaise and even fears of possible deflation prompted the FOMC to make a thirteenth rate cut on June 25, 2003. The quarter point cut reduced the federal funds rate to 1.00 percent, the lowest level in forty-five years.

Even though some signs of economic strength, mainly attributed to consumer spending, began to crop up during the latter part of 2002 and into 2003, Chairman Greenspan appeared to be concerned with sharp declines in capital spending in the business sector.

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During the latter part of 2003, the FOMC went on record as saying that it intended to leave interest rates low "for a considerable period." After its two-day meeting that ended on January 28, 2004, the FOMC announced "that with inflation 'quite low' and plenty of excess capacity in the economy, policy-makers 'can be patient in removing its policy accommodation.' 13

- Q. What actions has the Federal Reserve taken in terms of interest rates since the beginning of 2001?
- A. As noted earlier, from January 2001 to June 2003 the Federal Reserve cut interest rates a total of thirteen times. During this period, the federal funds rate fell from 6.50 percent to 1.00 percent. The FOMC reversed this trend on June 29, 2004 and raised the federal funds rate 25 basis points to 1.25 percent. From June 29, 2004 to January 31, 2006, the FOMC raised the federal funds rate thirteen more times to a level of 4.50 percent.

The FOMC's January 31, 2006 meeting marked the final appearance of Alan Greenspan, who had presided over the rate setting body for a total of eighteen years. On that same day, Greenspan's successor, Ben Bernanke, the former chairman of the President's Council of Economic Advisers and a former Fed governor under Greenspan from 2002 to 2005, was confirmed by the U.S. Senate to be the new Federal Reserve chief.

<sup>&</sup>lt;sup>13</sup> Wolk, Martin, "Fed holds interest rates steady," MSNBC, January 28, 2004.

As expected by Fed watchers, Chairman Bernanke picked up where his predecessor left off and increased the federal funds rate by 25 basis points during each of the next three FOMC meetings for a total of seventeen consecutive rate increases since June 2004, and raising the federal funds rate to a level of 5.25 percent. The Fed's rate increase campaign finally came to a halt at the FOMC meeting held on August 8, 2006, when the FOMC decided not to raise rates.

- Q. What was the reaction in the financial community to the Fed's decision not to raise interest rates?
- A. As in the past, banks followed the Fed's lead once again and held the prime rate to a level of 8.25 percent, or 300 basis points higher than the federal funds rate of 5.25 percent established on June 29, 2006.
- Q. How did analysts view the Fed's actions between January 2001 and August 2006?
- A. According to an article that appeared in the December 2, 2004 edition of <a href="https://docs.ncbi.nlm.nih.gov/">The Wall Street Journal</a>, the FOMC's decision to begin raising rates two years ago was viewed as a move to increase rates from emergency lows in order to avoid creating an inflation problem in the future as opposed to slowing down the strengthening economy. In other words, the Fed was

<sup>&</sup>lt;sup>14</sup> McKinnon, John D. and Greg IP, "Fed Raises Rates by a Quarter Point," <u>The Wall Street Journal</u>, September 22, 2004.

trying to head off inflation *before* it became a problem. During the period following the August 8, 2006 FOMC meeting, the Fed's decisions not to raise rates were viewed as a gamble that a slower U.S. economy would help to cap growing inflationary pressures.<sup>15</sup>

- Q. Was the Fed attempting to engineer another "soft landing", as it did in the mid-nineties, by holding interest rates steady?
- A. Yes, however, as pointed out in an August 2006 article in The Wall Street

  Journal by E.S. Browning, soft landings like the one that the Fed
  managed to pull off during the 1994-95 time frame, in which a recession or
  a bear market were avoided rarely happen<sup>16</sup>. Since it began increasing
  the federal funds rate in June 2004, the Fed had assured investors that it
  would increase rates at a "measured" pace. Many analysts and
  economists interpreted this language to mean that former Chairman
  Greenspan would be cautious in increasing interest rates too quickly in
  order to avoid what is considered to be one of the Fed's few blunders
  during Greenspan's tenure a series of increases in 1994 that caught the
  financial markets by surprise after a long period of low rates. The rapid
  rise in rates contributed to the bankruptcy of Orange County, California

<sup>&</sup>lt;sup>15</sup> Ip, Greg, "Fed Holds Interest Rates Steady As Slowdown Outweighs Inflation," <u>The Wall Street Journal Online Edition</u>, August 8, 2006.

<sup>&</sup>lt;sup>16</sup> Browning, E.S, "Not Too Fast, Not Too Slow...," <u>The Wall Street Journal Online Edition</u>, August 21, 2006.

 and the Mexican peso crisis<sup>17</sup>. According to Mr. Browning, at the time that his article was published, the hope was that Chairman Bernanke would succeed in slowing the economy "just enough to prevent serious inflation, but not enough to choke off growth." In other words, "a 'Goldilocks economy,' in which growth is not too hot and not too cold."

- Q. Was the Fed's attempt to engineer a soft landing successful during the period that followed the August 8, 2006 FOMC meeting?
- A. It would appear so. Articles published in the mainstream financial press were generally upbeat on the economy during that period. An example of this is an article written by Nell Henderson that appeared in the January 30, 2007 edition of <a href="The Washington Post">The Washington Post</a>. According to Ms. Henderson, "a year into [Fed Chairman] Bernanke's tenure, the [economic] picture has turned considerably brighter. Inflation is falling; unemployment is low; wages are rising; and the economy, despite continued problems in housing, is growing at a brisk clip." 18
- Q. What has been the state of the economy over the past two years?
- A. Reports in the mainstream financial press during the majority of 2007 reflected the view that the U.S. economy was slowing as a result of a

<sup>&</sup>lt;sup>17</sup> Associated Press (AP), "Fed begins debating interest rates" USA Today, June 29, 2004.

<sup>&</sup>lt;sup>18</sup> Henderson, Nell, "Bullish on Bernanke" <u>The Washington Post</u>, January 30, 2007.

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19 20 worsening situation in the housing market and higher oil prices. The overall outlook for the economy was one of only moderate growth at best. Also during this period the Fed's key measure of inflation began to exceed the rate setting body's comfort level.

On August 7, 2007, the FOMC decided not to increase or decrease the federal funds rate for the ninth straight time and left its target rate unchanged at 5.25 percent. 19 At the time of the Fed's decision, analysts speculated that a rate cut over the next several months was unlikely given the Fed's concern that inflation would fail to moderate. However, during this same period, evidence of an even slower economy and a possible recession was beginning to surface. Within days of the Fed's decision to stand pat on rates, a borrowing crisis rooted in a deterioration of the market for subprime mortgages and securities linked to them, forced the Fed to inject \$24 billion in funds (raised through open market operations) into the credit markets.<sup>20</sup> By Friday, August 17, 2007, after a turbulent week on Wall Street, the Fed made the decision to lower its discount rate (i.e. the rate charged on direct loans to banks) by 50 basis points, from 6.25 percent to 5.75 percent, and took steps to encourage banks to borrow from the Fed's discount window in order to provide liquidity to

<sup>&</sup>lt;sup>19</sup> Ip, Greg, "Markets Gyrate As Fed Straddles Inflation, Growth" <u>The Wall Street Journal</u>, August 8, 2007

<sup>&</sup>lt;sup>20</sup> Ip, Greg, "Fed Enters Market To Tamp Down Rate" <u>The Wall Street Journal</u>, August 9, 2007

lenders. According to an article that appeared in the August 18, 2007 edition of <u>The Wall Street Journal</u>, <sup>21</sup> the Fed had used all of its tools to restore normalcy to the financial markets. If the markets failed to settle down, the Fed's only weapon left was to cut the Federal Funds rate – possibly before the next FOMC meeting scheduled on September 18, 2007.

- Q. Did the Fed cut rates as a result of the subprime mortgage borrowing crises?
- A. Yes. At its regularly scheduled meeting on September 18, 2007, the FOMC surprised the investment community and cut both the federal funds rate and the discount rate by 50 basis points (25 basis points more than what was anticipated). This brought the federal funds rate down to a level of 4.75 percent. The Fed's action was seen as an effort to curb the aforementioned slowdown in the economy. Over the course of the next four months, the FOMC reduced the Federal funds rate by a total 175 basis points to a level of 3.00 percent mainly as a result of concerns that the economy was slipping into a recession. This included a 75 basis point reduction that occurred one week prior to the FOMC's meeting on January 29, 2008.

<sup>&</sup>lt;sup>21</sup> Ip, Greg, Robin Sidel and Randall Smith, "Fed Offers Banks Loans Amid Crises" <u>The Wall Street Journal</u>, August 9, 2007

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Q. What actions has the Fed taken in regard to interest rates since the beginning of 2008?

The Fed made two more rate cuts which included a 75 basis point reduction in the federal funds rate on March 18, 2008 and an additional 25 basis point reduction on April 30, 2008. The Fed's decision to cut rates was based on its belief that the slowing economy was a greater concern than the current rate of inflation (which the majority of FOMC members believed would moderate during the economic slowdown).<sup>22</sup> As a result of the Fed's actions, the federal funds rate was reduced to a level of 2.00 percent. From April 30, 2008 through September 16, 2008, the Fed took no further action on its key interest rate. However, the days before and after the Fed's September 16, 2008 meeting saw longstanding Wall Street firms such as Lehman Brothers, Merrill Lynch and AIG failing as a result of their subprime holdings. By the end of the week, the Bush administration had announced plans to deal with the deteriorating financial condition which had now become a worldwide crisis. The administrations actions included former Treasury Secretary Henry Paulson's request to Congress for \$700 billion to buy distressed assets as part of a plan to halt what has been described as the worst financial crisis since the 1930's<sup>23</sup>. Amidst this turmoil, the Fed made the decision to cut the federal funds rate by another

Ip, Greg, "Credit Worries Ease as Fed Cuts, Hints at More Relief" <u>The Wall Street Journal</u>, March 19, 2008

Soloman, Deborah, Michael R. Crittenden and Damian Paletta, "U.S. Bailout Plan Calms Markets, But Struggle Looms Over Details" <u>The Wall Street Journal</u>, September 20, 2008

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50 basis points in a coordinated move with foreign central banks on October 8, 2008. This was followed by another 50 basis point cut during the regular FOMC meeting on October 29, 2008. At the time of this writing, the federal funds target rate now stands at 0.25 percent, the result of a 75 basis point cut announced on December 16, 2008. After FOMC meetings in January, March April, June, August and September of 2009, the Fed elected not to make any changes in the federal funds rate, stating in January that the rate would remain low "for some time." Presently, the Fed's discount rate is at 0.50 percent, a level not seen since the 1940s. Based on data released during the early part of December 2008, the U.S. has officially been in a recession since December of 2007.

- Q. Putting this all into perspective, how have the Fed's actions since 2000 affected benchmark rates?
- A. U.S. Treasury instruments are for the most part still at historically low levels. As can be seen on the first page of Attachment D, the previously mentioned federal discount rate (the rate charged to the Fed's member banks), has fallen to 0.50 percent from 1.75 percent in 2008.

Hilsenrath, Jon and Liz Rappaport, "Fed Weighs Idea of Buying Treasurys as Focus Shifts" The Wall Street Journal, January 29, 2009

Hilsenrath, Jon, "Fed Cuts Rates Near Zero to Battle Slump" The Wall Street Journal, December 17, 2008

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Q. What has been the trend in other leading interest rates over the last year?

As of October 14, 2009, all of the leading interest rates, with the exception of the 30-year constant maturity and 30-year Zero rates, have dropped from levels that existed a year ago (Attachment D, Value Line Selection & Opinion page 3253). The prime rate has fallen from 4.50 percent a year ago to 3.25 percent. The benchmark federal funds rate, just discussed. has decreased from 1.50 percent, in October 2008, to a level of 0.00 -0.25 percent (as a result of the December 16, 2008 rate cut discussed above). The yields on all of the non-inflation protected maturities of U.S. Treasury instruments exhibited in my Attachment C have also decreased over the past year. A previous trend, described by former Chairman Greenspan as a "conundrum" 26, in which long-term rates fell as short-term rates increased, thus creating a somewhat inverted yield curve that existed as late as June 2007, is completely reversed and a more traditional yield curve (one where yields increase as maturity dates lengthen) presently exists (Attachment D). The 5-year Treasury yield, used in my CAPM analysis, has fallen from 2.82 percent, in October 2008, to 2.33 percent as of October 14, 2009. As noted above, the 30-Year Treasury constant maturity rate increased from 4.19 percent over the past year to 4.26 percent. These current yields are considerably lower than

<sup>&</sup>lt;sup>26</sup> Wolk, Martin, "Greenspan wrestling with rate 'conundrum'," MSNBC, June 8, 2005

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corresponding yields that existed during the early nineties and at the beginning of the current decade (as can be seen on Schedule WAR-8).

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Q. What is the current outlook for the economy?

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Value Line's analysts have become increasingly optimistic in their outlook on the economy as of late and had this to say in the October 23, 2009

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edition of Value Line's Selection and Opinion publication:

The economy remains a good news, bad news story. Clearly, the business outlook is improving. In fact, much of the data — covering a range of consumer and industrial sectors - now affirm that the recession ended in the second quarter and an upturn began over the summer. What is less clear is the strength of that revival, as most reports being issued are consistent only in being inconsistent.

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Value Line's analysts went on to state

16 17 18 Investors are smiling again, after dramatic stock market gains this year. Now, the challenge will be to extend that positive momentum. This will not be an easy task given the ever-richer P/E ratios, which are now present, following the market's steep rise.

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> Q. How are water utilities faring in the current economic environment?

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Although there are some concerns regarding long-term infrastructure

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requirements, water utilities still appear to a good investment according to

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Value Line analyst Andre J. Costanza. In the October 23, 2009 quarterly

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This industry is a good place for cautious investors looking to park themselves until a sustained market recovery is evident. Water utility

update on the water utility industry Mr. Costanza stated the following:

stocks are historically more recession proof than the broader market, with their steady dividend growth reducing turbulence in share price and

padding returns

is reasonable for LPSCO?

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# CAPITAL STRUCTURE AND COST OF DEBT

Yes, I have.

proposed capital structure?

models, has produced such a return.

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- Q. Please describe the Company's proposed capital structure.
- A. The Company is proposing a capital structure comprised of 17.83 percent

After weighing the economic information that you've just discussed, do you

believe that the 8.01 percent cost of equity capital that you have estimated

I believe that my recommended 8.01 percent cost of equity will provide

LPSCO with a reasonable rate of return on the Company's invested capital

when economic data on interest rates (that are low by historical

standards), the current situation in new housing construction, and the

Fed's ability to keep inflation in check are all taken into consideration. As I

noted earlier, the Hope decision determined that a utility is entitled to earn

a rate of return that is commensurate with the returns it would make on

other investments with comparable risk. I believe that my cost of equity

analysis, which is an average of the results of both the DCF and CAPM

Have you reviewed LPSCO's testimony regarding the Company's

long-term debt and 82.17 percent common equity.

- Q. Is LPSCO's proposed capital structure in line with industry averages?
  - A. No. LPSCO's capital structure is much heavier in common equity as opposed to the capital structures of the other water and natural gas companies included in my cost of capital analysis (Schedule WAR-9). The capital structures for those utilities averaged approximately 47.8 percent long-term debt and 52.2 percent equity, that is displayed on Schedule WAR-9 of my direct testimony.
  - Q. In terms of risk, how does LPSCO's capital structure compare to the water utilities in your sample?
  - A. The water utilities in my sample would be perceived as having a higher level of financial risk (i.e. the risk associated with debt repayment) because of their higher levels of debt. The additional financial risk due to debt leverage is embedded in the cost of equities derived for those companies through the DCF analysis. Thus, the cost of equity derived in my DCF analysis is applicable to companies that are more leveraged and, theoretically speaking, riskier than a utility such as LPSCO. In the case of a publicly traded company, like those included in my proxy, a company with LPSCO's level of equity would be perceived as having much lower financial risk and would therefore also have a lower expected return on common equity.

Direct Testimony of William A. Rigsby Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104 Q. Are you recommending a hypothetical capital structure for LPSCO in this case? A. No. Although LPSCO's capital structure is heavier in common equity than the utilities in my water and natural gas samples, I am recommending that the Commission adopt the Company-proposed capital structure since it is comprised of actual industrial development authority ("IDA") debt. Q. Haven't you recommended hypothetical capital structures in the past for other Algonquin-owned utilities? Α. Yes, however those utilities had imprudent capital structures comprised of 100 percent common equity. To correct that situation, I recommended hypothetical capital structures comprised of sixty percent debt and forty percent equity. Q. Have you made any downward adjustment to your cost of equity recommendation as a result of the lower level of risk attributable to LPSCO's equity rich capital structure? No, I have not. I am comfortable with my unadjusted 8.01 percent cost of Α. equity capital given the current state of the economy and the most recent Value Line projections on the water utility industry. Q. What is the Company-proposed cost of long-term debt?

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The Company-proposed cost of long-term debt is 6.39 percent.

- 1 | Q. Are you in agreement with the Company-proposed cost of long-term debt?
  - A. Yes. I am recommending that the Commission adopt the Company-proposed 6.39 percent cost of long-term IDA debt.
  - Q. How does the Company's proposed weighted cost of capital compare with your recommendation?
  - A. LPSCO has proposed a weighted average cost of capital of 11.41 percent which reflects the aforementioned levels of long-term debt and common equity in the Company-proposed capital structure. The Company-proposed 11.41 percent weighted average cost of capital is 369 basis points higher than the 7.72 percent weighted cost that I am recommending. This is the result of the higher Company-proposed 12.50 percent cost of common equity.

#### COMMENTS ON LPSCO'S COST OF EQUITY CAPITAL

## **TESTIMONY**

- Q. How does your recommended cost of equity capital compare with the cost of equity capital proposed by the Company?
- A. The Company's cost of capital witness, Mr. Bourassa is recommending a cost of common equity of 12.50 percent. His 12.50 percent cost of equity capital is 449 basis points higher than the 8.01 percent cost of equity capital that I have calculated.

- Q. What methods did Mr. Bourassa use to arrive at his cost of common equity for LPSCO?
- A. Mr. Bourassa used both the DCF and CAPM methods. His DCF analysis relies on two constant growth versions of the DCF model that are similar to the model that I have used. His first constant growth model relies only on earnings growth estimates for the "g" component of the model while his second constant growth model relies on sustainable growth estimates for the "g" component. Mr. Bourassa also uses a two-stage growth version of the DCF model. The results of his DCF analyses range from 8.30 percent to 13.60 percent and produce a mean average of 11.70 percent. Mr. Bourassa's CAPM analysis uses the same model that I have used but he obtains two different results: one obtained by using an historical risk premium and the other by using a current market risk premium. His CAPM analysis produces results of 9.30 percent using an historical risk premium and 23.50 percent using a current market risk premium. His average CAPM result is 16.4 percent.
- Q. What are the main reasons for the difference in the results that you obtained from your DCF analysis and the results that Mr. Bourassa
  - obtained from his DCF analysis using the constant growth model?
- A. Mr. Bourassa conducted his analysis in February of 2009 and
  - consequently much of the data that he used in his analysis is now stale.
  - This can be seen in a price comparison of three of the water company

stocks that we both used in our samples: The difference between the average adjusted closing stock prices used in my DCF model and spot prices used by Mr. Bourassa in his DCF models are as follows:

	<u>Rigsby</u>	<u>Bourassa</u>	<u>Difference</u>
AWR	\$35.29	\$33.91	\$1.38
CWT	\$38.22	\$40.30	- \$2.08
WTR	\$16.96	\$18.79	- \$1.83

Q. What is the main difference between your constant growth DCF results and Mr. Bourassa's first constant growth model which relied strictly on earnings growth?

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In respect to Mr. Bourassa's first constant growth model, which relied strictly on earnings growth, there is only a 4 basis point difference between the average dividend yields of the three water utilities that our samples have in common; his 3.00 percent to my 3.04 percent. However, there is a 100 basis point difference between his 8.17 percent average growth estimate ("g") for the three common utilities (i.e. AWR, CWT, and WTR) as opposed to my 7.17 percent estimate which also takes into account other growth estimates on dividends and book value. Subsequently Mr. Bourassa's DCF estimate, relying only on earnings growth, is 9.05 percent as opposed to my estimate of 7.18 percent which takes into account more recent data on stock prices and growth

projections for earnings, dividends and book value on the three water utilities our samples have in common.

Q. Please explain the main difference between your constant growth DCF results and Mr. Bourassa's second constant growth model which relied on sustainable growth?

A. The same 4 basis point difference between our estimated dividend yields exists in Mr. Bourassa's sustainable growth version of the constant growth model. However, his estimate for the "g" component is seriously flawed. As I noted earlier in my testimony, Value Line does not provide long-term projections on earnings, dividends and book value on the other three water utilities used by Mr. Bourassa in his sample. Consequently, Mr. Bourassa uses an unfounded 7.01 percent averaging derived from his growth estimates for AWR, CWT and WTR and applied it to the other three water utilities. This has the effect of increasing his DCF model's median average estimate by 40 basis points.

Q. Did you conduct a two-stage DCF analysis like the one conducted by Mr. Bourassa?

A. No. Primarily because the growth rate component that I estimated for my single-stage model already takes into consideration both the near-term and long-term growth rate projections that Mr. Bourassa averaged in his

multi-stage model. This being the case, I saw no need to conduct a separate DCF analysis.

Q. What are the main differences between your CAPM results and Mr. Bourassa's CAPM results?

- A. The differences between our CAPM results is attributable to the selection of U.S. Treasury instruments used as inputs for the risk-free rate of return and the time period that has expired since Mr. Bourassa filed his direct testimony. Mr. Bourassa's average beta of 0.93 has also fallen since his testimony was filed, and his market risk premiums of 7.5 percent to 21.30 percent are simply not realistic when compared with the market risk premiums, ranging from 4.20 percent to 6.10 percent, that I obtained from Morningstar's 2009 SBBI Yearbook.
- Q. Please explain the differences in your risk free rates of return.
- A. I relied on a 5-year treasury rate whereas Mr. Bourassa relied on an average of 5, 7, and 10-year Treasury rates in his historical risk premium CAPM Analysis, and a 30-year Treasury rate in his current market risk premium CAPM analysis. Consequently his risk free rate of return is higher due to the inclusion of longer-term Treasury yields. Mr. Bourassa's reliance on maturities that are greater than five years is unfounded when one takes into account that utilities generally file for new rates every three to five years.

Direct Testimony of William A. Rigsby Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104

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Q. What would be Mr. Bourassa's updated CAPM inputs using current data instead of the stale data used in the Company's testimony?

Yes. Based on data for the week ended October 23, 2009 (obtained in a Federal Reserve Statistical Release dated October 26, 2009), the average vield of the 5, 7 and 10-year U.S. treasury instruments, that Mr. Bourassa used as the risk free rate in his historical market risk premium CAPM model, was 2.94 percent as opposed to the average yield of 2.30 percent that he relied on. The yield on the 30-year rate was 4.22 percent as opposed to the 3.70 percent rate that Mr. Bourassa used in his current market risk premium CAPM model. Although his selected Treasury yields increased since February of 2009, the average beta used in his CAPM analyses has dropped from an average of 0.98 to an average of 0.80. Holding his higher market risk premium inputs constant produces an historical market risk premium result of 8.94 percent as opposed to his 9.30 percent, and a current market risk premium result of 21.26 percent as opposed to his 23.50 percent. However, as I stated earlier, Mr. Bourassa's market risk premium inputs are clearly excessive and should not be given any weight.

Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104 1 Q. What would Mr. Bourassa's CAPM models produce if you substituted a 2 5.15 percent average of your market risk premiums? 3 Α. Mr. Bourassa's historical market risk premium model would produce an 4 expected return of 7.06 percent and his current market risk premium 5 model would produce an expected return of 8.34 percent. 6 7 Q. How did Mr. Bourassa arrive at his final 12.50 percent cost of common 8 equity for LPSCO? 9 A. Mr. Bourassa's final estimate of 12.50 percent is based upon his review of 10 the results of his various DCF and CAPM models, along with the 11 application of his "expertise and informed judgment." 12 13 Q. Is there any merit in the rationale used by Mr. Bourassa in regard to size 14 on page 18 of his direct testimony? 15 No. As I stated earlier in my testimony, LPSCO is a wholly owned Α. 16 subsidiary of Algonquin Power Income Fund, a large publicly traded 17 mutual fund that has direct access to the capital markets. In addition to this, to the best of my knowledge, the Commission has never granted a 18 19 higher cost of common equity based on company size. 20 21 22 23

Direct Testimony of William A. Rigsby

Direct Testimony of William A. Rigsby Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104 1 Q. Does your cost of capital recommendation take into consideration any 2 perceived business risks that LPSCO might face? 3 A. Yes. I believe that the large amount of equity contained in my 4 recommended capital structure would mitigate any perceived business 5 that investors might think LPSCO faces. 6 7 Q. Does your silence on any of the issues, matters or findings addressed in 8 the testimony of Mr. Bourassa or any other witness for LPSCO constitute 9 your acceptance of their positions on such issues, matters or findings? 10 A. No, it does not. 11 12 Does this conclude your testimony on LPSCO? Q. 13 A. Yes, it does.

		·		

# Qualifications of William A. Rigsby, CRRA

**EDUCATION:** University of Phoenix

Master of Business Administration, Emphasis in Accounting, 1993

Arizona State University College of Business

Bachelor of Science, Finance, 1990

Mesa Community College

Associate of Applied Science, Banking and Finance, 1986

Society of Utility and Regulatory Financial Analysts 38th Annual Financial Forum and CRRA Examination Georgetown University Conference Center, Washington D.C. Awarded the Certified Rate of Return Analyst designation after successfully completing SURFA's CRRA examination.

Michigan State University Institute of Public Utilities

N.A.R.U.C. Annual Regulatory Studies Program, 1997 &1999

Florida State University

Center for Professional Development & Public Service N.A.R.U.C. Annual Western Utility Rate School, 1996

**EXPERIENCE:** 

Public Utilities Analyst V

Residential Utility Consumer Office

Phoenix, Arizona April 2001 – Present

Senior Rate Analyst

Accounting & Rates - Financial Analysis Unit Arizona Corporation Commission, Utilities Division

Phoenix, Arizona July 1999 – April 2001

Senior Rate Analyst

Residential Utility Consumer Office

Phoenix, Arizona

December 1997 - July 1999

Utilities Auditor II and III

Accounting & Rates - Revenue Requirements Analysis Unit

Arizona Corporation Commission, Utilities Division

Phoenix, Arizona

October 1994 - November 1997

Tax Examiner Technician I / Revenue Auditor II

Arizona Department of Revenue

Transaction Privilege / Corporate Income Tax Audit Units

Phoenix, Arizona

July 1991 - October 1994

# RESUME OF RATE CASE AND REGULATORY PARTICIPATION

Utility Company	Docket No.	Type of Proceeding
ICR Water Users Association	U-2824-94-389	Original CC&N
Rincon Water Company	U-1723-95-122	Rate Increase
Ash Fork Development Association, Inc.	E-1004-95-124	Rate Increase
Parker Lakeview Estates Homeowners Association, Inc.	U-1853-95-328	Rate Increase
Mirabell Water Company, Inc.	U-2368-95-449	Rate Increase
Bonita Creek Land and Homeowner's Association	U-2195-95-494	Rate Increase
Pineview Land & Water Company	U-1676-96-161	Rate Increase
Pineview Land & Water Company	U-1676-96-352	Financing
Montezuma Estates Property Owners Association	U-2064-96-465	Rate Increase
Houghland Water Company	U-2338-96-603 et al	Rate Increase
Sunrise Vistas Utilities Company – Water Division	U-2625-97-074	Rate Increase
Sunrise Vistas Utilities Company – Sewer Division	U-2625-97-075	Rate Increase
Holiday Enterprises, Inc. dba Holiday Water Company	U-1896-97-302	Rate Increase
Gardener Water Company	U-2373-97-499	Rate Increase
Cienega Water Company	W-2034-97-473	Rate Increase
Rincon Water Company	W-1723-97-414	Financing/Auth. To Issue Stock
Vail Water Company	W-01651A-97-0539 et al	Rate Increase
Bermuda Water Company, Inc.	W-01812A-98-0390	Rate Increase
Bella Vista Water Company	W-02465A-98-0458	Rate Increase
Pima Utility Company	SW-02199A-98-0578	Rate Increase

# RESUME OF RATE CASE AND REGULATORY PARTICIPATION (Cont.)

Utility Company	Docket No.	Type of Proceeding
Pineview Water Company	W-01676A-99-0261	WIFA Financing
I.M. Water Company, Inc.	W-02191A-99-0415	Financing
Marana Water Service, Inc.	W-01493A-99-0398	WIFA Financing
Tonto Hills Utility Company	W-02483A-99-0558	WIFA Financing
New Life Trust, Inc. dba Dateland Utilities	W-03537A-99-0530	Financing
GTE California, Inc.	T-01954B-99-0511	Sale of Assets
Citizens Utilities Rural Company, Inc.	T-01846B-99-0511	Sale of Assets
MCO Properties, Inc.	W-02113A-00-0233	Reorganization
American States Water Company	W-02113A-00-0233	Reorganization
Arizona-American Water Company	W-01303A-00-0327	Financing
Arizona Electric Power Cooperative	E-01773A-00-0227	Financing
360networks (USA) Inc.	T-03777A-00-0575	Financing
Beardsley Water Company, Inc.	W-02074A-00-0482	WIFA Financing
Mirabell Water Company	W-02368A-00-0461	WIFA Financing
Rio Verde Utilities, Inc.	WS-02156A-00-0321 et al	Rate Increase/ Financing
Arizona Water Company	W-01445A-00-0749	Financing
Loma Linda Estates, Inc.	W-02211A-00-0975	Rate Increase
Arizona Water Company	W-01445A-00-0962	Rate Increase
Mountain Pass Utility Company	SW-03841A-01-0166	Financing
Picacho Sewer Company	SW-03709A-01-0165	Financing
Picacho Water Company	W-03528A-01-0169	Financing
Ridgeview Utility Company	W-03861A-01-0167	Financing
Green Valley Water Company	W-02025A-01-0559	Rate Increase
Bella Vista Water Company	W-02465A-01-0776	Rate Increase
Arizona Water Company	W-01445A-02-0619	Rate Increase

# RESUME OF RATE CASE AND REGULATORY PARTICIPATION (Cont.)

Utility Company	Docket No.	Type of Proceeding
Arizona-American Water Company	W-01303A-02-0867 et al.	Rate Increase
Arizona Public Service Company	E-01345A-03-0437	Rate Increase
Rio Rico Utilities, Inc.	WS-02676A-03-0434	Rate Increase
Qwest Corporation	T-01051B-03-0454	Renewed Price Cap
Chaparral City Water Company	W-02113A-04-0616	Rate Increase
Arizona Water Company	W-01445A-04-0650	Rate Increase
Tucson Electric Power	E-01933A-04-0408	Rate Review
Southwest Gas Corporation	G-01551A-04-0876	Rate Increase
Arizona-American Water Company	W-01303A-05-0405	Rate Increase
Black Mountain Sewer Corporation	SW-02361A-05-0657	Rate Increase
Far West Water & Sewer Company	WS-03478A-05-0801	Rate Increase
Gold Canyon Sewer Company	SW-02519A-06-0015	Rate Increase
Arizona Public Service Company	E-01345A-05-0816	Rate Increase
Arizona-American Water Company	W-01303A-06-0014	Rate Increase
Arizona-American Water Company	W-01303A-05-0718	Transaction Approval
Arizona-American Water Company	W-01303A-05-0405	ACRM Filing
UNS Gas, Inc.	G-04204A-06-0463	Rate Increase
Arizona-American Water Company	W-01303A-07-0209	Rate Increase
Tucson Electric Power	E-01933A-07-0402	Rate Increase
Southwest Gas Corporation	G-01551A-07-0504	Rate Increase
Chaparral City Water Company	W-02113A-07-0551	Rate Increase
Arizona-American Water Company	W-01303A-08-0227 et al.	Rate Increase
Far West Water & Sewer Company	WS-03478A-08-0608	Interim Rate Increase
Johnson Utilities, LLC	WS-02987A-08-0180	Rate Increase
UNS Gas, Inc.	G-04204A-08-0571	Rate Increase
Arizona Water Company	W-01445A-08-0440	Rate Increase

# **RESUME OF RATE CASE AND REGULATORY PARTICIPATION (Cont.)**

<u>Utility Company</u>	Docket No.	Type of Proceeding
Black Mountain Sewer Corporation	SW-02361A-08-0609	Rate Increase
Global Utilities	SW-02445A-09-0077	Rate Increase

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# **ATTACHMENT A**

There has not been much change in the Water Utility Industry since our last review in July. Providers continued to reap the benefits of an increasingly favorable regulatory backing, with most in the group posting solid top- and bottomline growth in the second quarter (September results were not out as of the date this issue was published).

However, the industry has fallen well into the bottom half of our Survey for Timeliness, as shareprice gains paled in comparison to those enjoyed by the seemingly revitalized broader market. We suspect that water utility stocks will continue to lose some of their shine in the months ahead for similar reasons, as hopes of economic stability prompt many to look outside this relative safehaven in hopes of securing wider gains. Making matter worse, earnings growth is likely to slow in the second half of the year and remain weak thereafter, due to tougher comparisons and burgeoning operating costs.

Longer-term growth prospects are not much better either. Despite the brighter regulatory landscape, infrastructure costs are expected to continue ramping up due to aging water systems, geographic expansion, and increasingly stringent EPA regulations. These, along with the subsequent financing expenses, will offset most of the aforementioned help, and thus limit appreciation potential going forward. As a result, most of the stocks in this segment offer minimal 3-to 5-year appeal.

# **Bright Demand Picture**

These utilities have the ultimate job security. Water is a necessity, a fact that cannot be changed no matter what. Recognizing that a community's well being is closely tied to a providers health, many state regulatory bodies that were once antagonists, have changed their tune and taken on a more business approach. These authorities, which were put in place to help maintain a balance of power between customers and providers and to ensure fair business practices, are now handing down more favorable rulings. Responsible for reviewing and ruling on general rate requests made by utilities to help recover costs, they hold tremendous power and can potentially make or break a company. The recent about face in demeanor creates a far more favorable climate

	Utility Industry	Water	atistics:	site Sta	Compo	. (	
12		2010	2009	2008	2007	2006	2005
	Revenues (\$mill)	4475	4180	3913.8	3702.5	3454.1	1256.9
	Net Profit (\$mill)	485	425	352.7	d183.0	d5.8	148.2
40	Income Tax Rate	39.0%	38.0%	37.0%	NMF	NMF	40.5%
ofit 15	AFUDC % to Net Profit	10.0%	8.0%	6.5%	NMF	NMF	1.1%
io 50	Long-Term Debt Ratio	52.5%	54.0%	52.6%	51.0%	54.0%	50.4%
io 50	Common Equity Ratio	47.5%	46.0%	47.4%	49.0%	45.9%	49.5%
16	Total Capital (\$mill)	14125	13600	12629.1	12985.9	12113.9	3053.8
19	Net Plant (\$mill)	16950	16180	15356.1	14315.2	13308.3	4200.7
य (	Return on Total Cap'l	5.0%	5.0%	4.3%	.2%	1.6%	6.3%
ty 7	Return on Shr. Equity	7.0%	7.0%	5.9%	NMF	NMF	9.8%
ity 7	Return on Com Equity	7.0%	7.0%	5.9%	NMF	NMF	9.8%
4	Retained to Com Eq	3.5%	3.0%	2.9%	NMF	NMF	3.7%
of	All Div'ds to Net Prof	62%	65%	51%	NMF	NMF	62%
	Avg Ann'l P/E Ratio		~		NMF	NMF	29.4
	Relative P/E Ratio	ures are e Line			NMF	NMF	1.57
d i	Avg Ann'l Div'd Yield	nates	esti		2.3%	2.0%	2.1%

# **INDUSTRY TIMELINESS: 72 (of 98)**

and augurs well for providers.

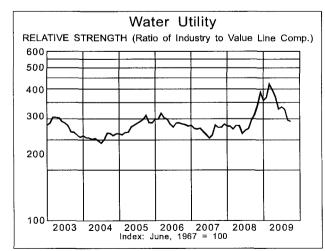
# **Alarming Costs**

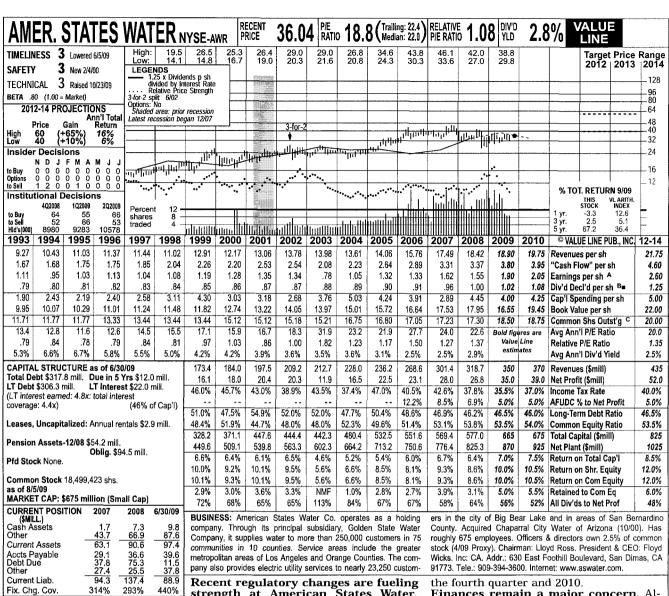
That said, the water utility industry has some issues to contend with. Infrastructures are getting older and becoming inadequate in many cases. Some will require heavy investment in order to make the necessary repairs, while EPA standards get tougher due to the potential threat of bioterrorism. In all, infrastructure costs are estimated to amount to hundreds of millions of dollars over the next decade. Unfortunately, most operating in this space are laden with debt and strapped for cash. They will be forced to seek outside financing in order to meet the growing capital outlays, with the higher interest rate costs and greater share counts thwarting shareholder returns. Note, however, that, as a result of the industry's capital intensive nature, consolidation is white hot. Those with the flexibility to meet its commitments have ample opportunity to make deals and grow their customer base.

# Conclusion

This industry is a good place for cautious investors looking to park themselves until a sustained market recovery is evident. Water utility stocks are historically more recession proof than the broader market, with their steady dividend growth reducing turbulence in share price and padding returns. However, those with a penchant for growth will probably want to take a pass, opting for an area with more upside. There are a couple of issues here that stand out for 3- to 5-year appreciation potential, namely Aqua America and Southwest Water Company, but the latter's Below Average (4) Safety rank and poor Financial Strength rating may evoke some apprehension. Meanwhile, Aqua's dependence on an aggressive acquisition tendency to drive gains may well need to be tempered if finances continue to deteriorate. American Water Works is another interesting option, but its short trading history and lack of performance indicators should scare off most. As always, we advise potential investors to read the individual reports of each stock before making a financial commitment.

Andre J. Costanza





ANNUAL RATES Past Est'd '06-'08 of change (per sh) Revenues 10 Yrs. 5 Yrs. to '12-'14 5.0% 6.0% 5.5% 2.0% 5.0% 'Cash Flow' Earnings Dividends Book Value

Cal- endar			VENUES ( Sep. 30		Full Year
2006	64.3	63.0	75.0	66.3	268.
2007	72.3	79.3	75.8	74.0	301.
2008	68.9	80.3	85.3	84.2	318.
2009	79.6	93.6	91.8	85.0	350
2010	83.0	99.0	98.0	90.0	370
Cal-	E/	RNINGS F	ER SHARI	ΕA	Full
endar	Mar.31	Jun. 30	Sep. 30	Dec. 31	Year
2006	.35	.36	.32	.30	1.33
2007	.40	.42	.44	.35	1.62
2008	.30	.53	.26	.43	1.55
2009	.28	.64		.42	1.90
2010	.30	.65	.60	.50	2.05
Cal-	QUAR	TERLY DIV	/IDENDS P	AID B=	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2005	.225	.225	.225	.225	.90
2006	.225	.225	.225	.235	.91
2007	.235	.235	.235	.250	.96
2008	.250	.250	.250	.250	1.00
2009	.250	.250	.250		

strength at American States Water. The water utility provider posted earnings of \$0.64 a share in the second quarter, 21% better than last year, as a more business friendly approach by the California Public Utilities Commission helped sales improve 17%, to \$94 million, despite a decrease in water consumption. Specifically, the adoption of a water rate adjustment mechanism and a modified cost balancing account were \$2.2 million accretive to the top line and boosted share earnings by \$0.07. We suspect that third-quarter results were probably even more impressive, with the bottom line nearly doubling from last year's weak tally. As a result, we've raised our full-year earnings estimate by 12% to \$1.90.

We think there could be some hurdles **ahead, however.** Comparisons get much tougher beginning with the December guarter and are likely to remain so henceforth. Meanwhile, operating costs appear to be on the rise, with infrastructure and maintenance expenses continuing to mount due to aging water systems. Thus, we look for growth to slow considerably in Finances remain a major concern. Although management paid down roughly \$45 million in debt in the June quarter, it was forced to issue shares to do so. Further debt reduction is highly unlikely going forward, with ongoing financing likely to be used to meet capital requirements. In fact, we look for AWR to tap debt and equity markets in the future in order to comply with increasingly stringent EPA regulations and improve infrastructures. The increased interest rate expense and greater share count that will accompany such maneuverings are likely to dilute future gains, though.

Growth-minded investors can find better options. AWR does not stand out for Timeliness or 3- to 5-year appreciation potential, as infrastructure costs mire future growth rates. Although income-minded investors may be hesitant to jump aboard, given that there has yet to be an announcement about a dividend increase, we are not concerned and suspect that a raise is on the horizon, thus maintaining the history of annual dividend growth

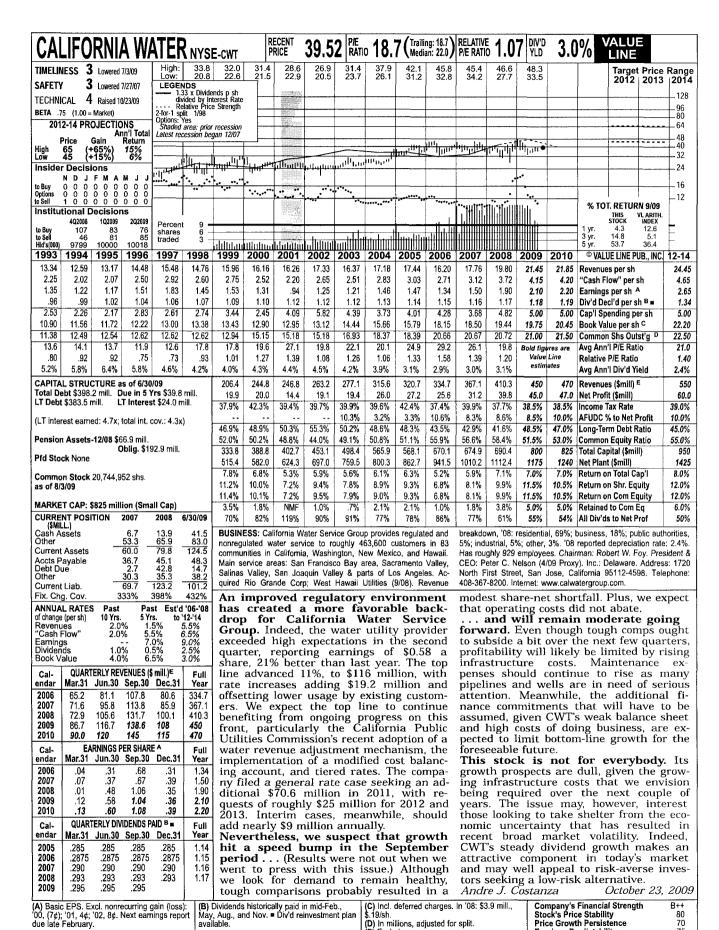
October 23, 2009 Andre J. Costanza

(A) Primary earnings. Excludes nonrecurring gains/(losses): '04, 14¢; '05, 25¢; '06, 6¢; '08, (27¢). Next earnings report due early Nov. May not add due to rounding.

(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for split.

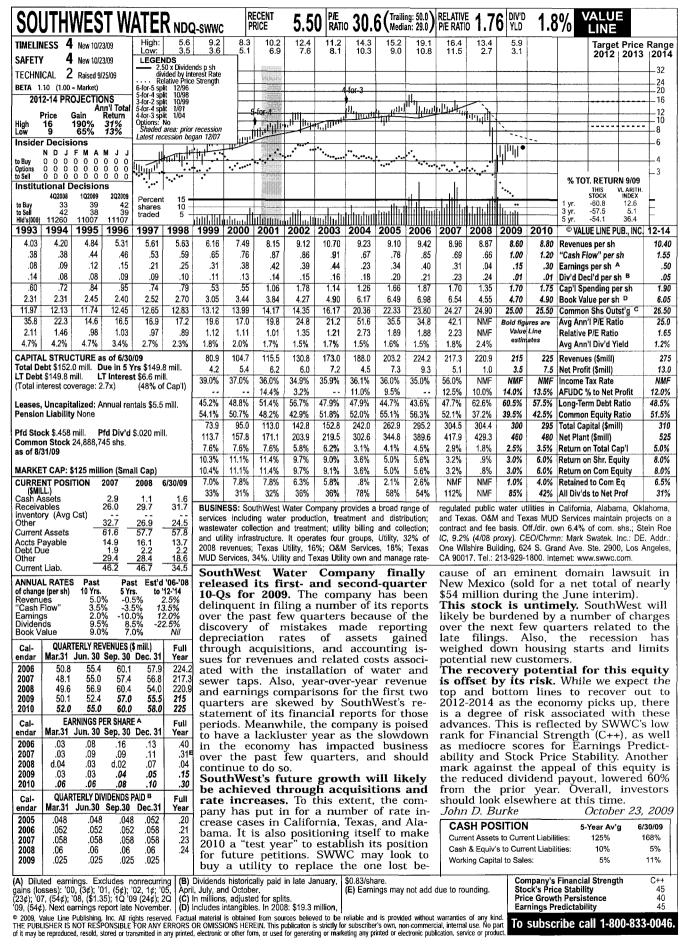
Company's Financial Strength Stock's Price Stability R++ Price Growth Persistence Earnings Predictability

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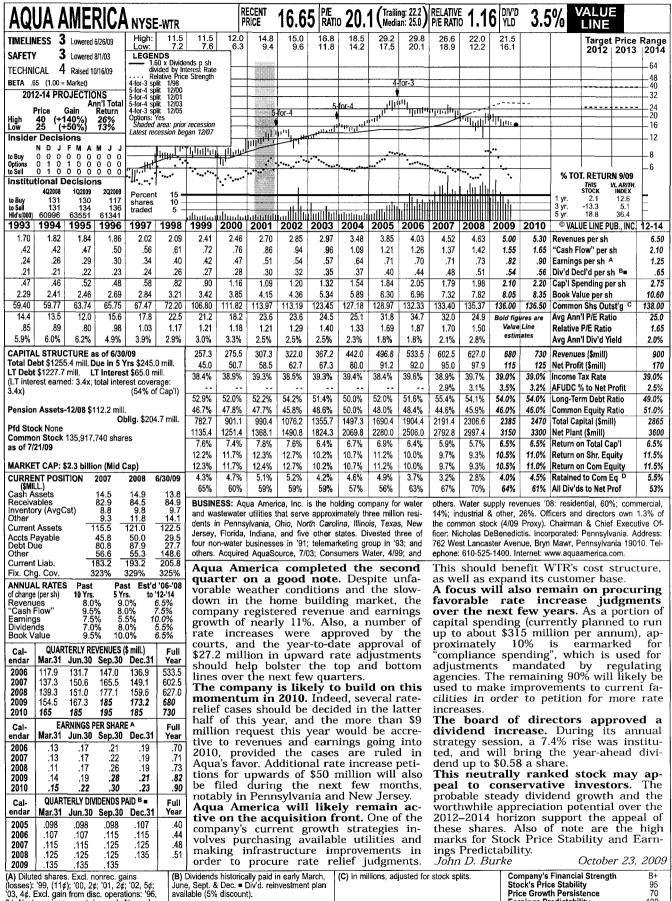


(D) In millions, adjusted for split.
(E) Excludes non-reg. rev. © 2009, Value Line Publishing, Inc. All rights reserved, Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

Company's Financial Strength Stock's Price Stability Price Growth Persistence Earnings Predictability 80



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available (5% discount).

Company's Financial Strength Stock's Price Stability Price Growth Persistence B+ 95 Earnings Predictability

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# **ATTACHMENT B**

The Natural Gas Utility Industry has lost some ground since our June review. This group now ranks in the middle of our industry spectrum for Timeliness. The economy has shown signs of life in recent months, which has led most investors to look to more-risky plays as opposed to stable picks like natural gas utilities. However, investors should note that these equities typically offer attractive dividend yields that are backed by steady cash flows.

# **Economic Environment**

No doubt, this sector has been pressured by the dour economic climate. The weakness in the housing market has particularly weighed on results for natural gas utilities. Usage has moderated as customers have curbed their consumption in an effort to rein in expenses. What's more, customer growth has been a concern in recent months. These businesses have also been having a tougher time collecting bills of late, which can also hurt results. Therefore, we suggest interested investors watch these trends in the months ahead as they will probably influence this group's performance.

# Regulation

Rate cases are a key theme for companies in this sector. These businesses are regulated by state commissions that determine the return on equity these utilities can achieve. As a result, the performance of these equities remains tied to the current rates these companies have in place. Numerous utilities, at any given time, often have cases pending where they seek better rates from these commissions. Positive or negative news regarding a rate case can have a notable impact on a stock's performance in this industry. Notably, the falling natural gas prices in recent months has helped companies seeking rate relief. Indeed, lower prices favor customers, which makes a new rate for these utilities more palatable. Still, regulatory bodies try to strike a balance between customer and shareholder interests when evaluating a rate case. Interested investors should keep a close eye on stocks that have cases pending when reading the following pages.

**Business Strategy** 

Weather is another element to consider when evalu-

	ral Gas Utility	s: Natu	tatistic	osite S	Comp		
12-14		2010	2009	2008	2007	2006	2005
52750	Revenues (\$mill)	47000	45500	44207	38528	38273	36075
2150	Net Profit (\$mill)	1850	1775	1694.2	1562.4	1553.3	1386.0
36.0%	Income Tax Rate	36.0%	36.0%	35.7%	33.9%	35.3%	36.0%
4.1%	Net Profit Margin	3.9%	3.9%	3.8%	4.1%	4.0%	3.8%
52.0%	Long-Term Debt Ratio	51.0%	51.0%	50.6%	50.4%	51.2%	51.3%
46.0%	Common Equity Ratio	48.0%	48.0%	49.4%	49.5%	48.7%	48.4%
40000	Total Capital (\$mill)	34750	33250	32729	32263	30847	29218
46250	Net Plant (\$mill)	38500	36750	35342	33936	32543	30894
7.0%	Return on Total Cap'l	6.5%	6.5%	6.8%	6.5%	6.6%	6.5%
11.0%	Return on Shr. Equity	10.5%	10.0%	10.5%	9.8%	10.2%	9.7%
y 11.0%	Return on Com Equity	10.5%	10.0%	10.5%	9.8%	10.2%	9.8%
5.0%	Retained to Com Eq	4.5%	4.0%	4.3%	3.7%	4.0%	3.5%
65%	All Div'ds to Net Prof	62%	60%	59%	62%	61%	65%
13.0	Avg Ann'l P/E Ratio	ures are	Boid fir	13.9	16.6	15.6	17.1
.85	Relative P/E Ratio	e Line nates	Valu	.83	.88	.84	.91
4.6%	Avg Ann'i Div'd Yield	nates	estr	4.2%	3.7%	3.9%	3.8%
ge 400%	Fixed Charge Coverage	375%	375%	358%	336%	327%	315%

# INDUSTRY TIMELINESS: 46 (of 98)

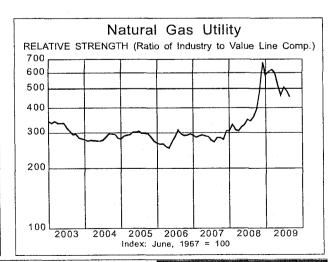
ating this industry's performance. Warmer or colderthan-expected weather can lead to volatile results. Thus, most of these utilities use weather-adjusted rate mechanisms to hedge against this risk. As such, we suggest conservative investors look for stocks that utilize this strategy. Many companies have also been increasingly investing in nonregulated businesses. These ventures are free from the regulatory bodies, and as a result, come with greater risk and reward tradeoff. On point, the utilities with nonregulated operations have generally been feeling the effects of the lower energy prices more so than these competitors without such operations. Also, of note, these nonregulated businesses provide another avenue for these utilities to diversify their income. All told, we expect these ventures to continue to be an important opportunity for this sector over the long term. Another strategy in this industry is conservation. Some governments have been offering these utilities incentives to participate in energy conservation programs. This approach allows these companies to adjust to market conditions without sacrificing profitability.

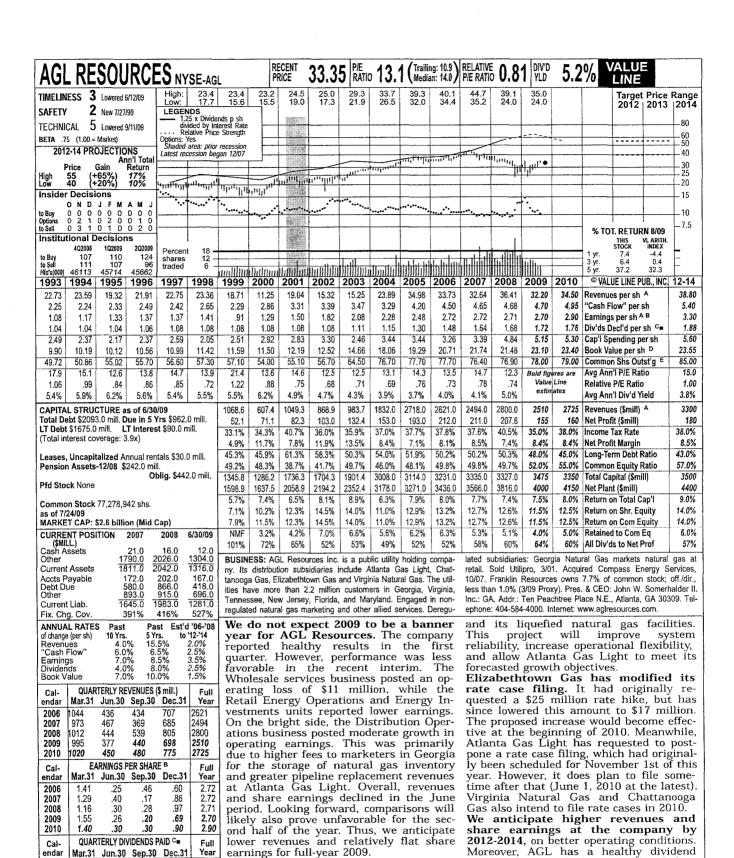
### Conclusion

As a group, natural gas utilities will likely remain under pressure in the months ahead due to unfavorable gas prices. As a result, this industry is ranked near the midpoint of our Timeliness spectrum. Still, risk-averse investors may want to consider this group if the economic recovery stalls. Natural gas utilities tend to be a solid defensive play when the stock market is faltering. However, this sector's long-term prospects are uninspiring. Therefore, we recommend patient investors look elsewhere.

All told, investors should study these reports carefully and limit their investments to equities that appear well positioned to weather the difficult operating environment. Additionally, these utilities offer dividend yields that are above the Value Line median. Therefore, income-oriented accounts may find stocks with yields that are above the industry average (4.3%) of interest.

Richard Gallagher





(A) Fiscal year ends December 31st. Ended (A) Tistar year this September 30th prior to 2002.

(B) Diluted earnings per share. Excl. nonrecurring gains (losses): '95, (\$0.83); '99, \$0.39; '00,

.37

.41

.42 .43

Jun.30 Sep.30

.37

.41

.42 .43

Dec.31

.37

.41 .42

Year

1.30

1.48

1 64

Mar.31

.37

.41

.42

.43

endar

2005

2006

2007

2008

2009

\$0.13; '01, \$0.13; '03, (\$0.07); '08, \$0.13. Next earnings report due late October. (C) Dividends historically paid early March, June, Sept., and Dec. ■ Div'd reinvest. plan available. (D) In-

earnings for full-year 2009.

Subsidiary Atlanta Gas Light has an-

nounced a system infrastructure investment project. This \$400 million pro-

gram will be completed over a 10-year pe-

riod. Infrastructure improvements include

upgrading the utility's distribution system

Company's Financial Strength Stock's Price Stability R++ 100 Price Growth Persistence Earnings Predictability

yield and earns high marks for Safety, Price Stability, and Earnings Predic-tability. From the present quotation, **this** 

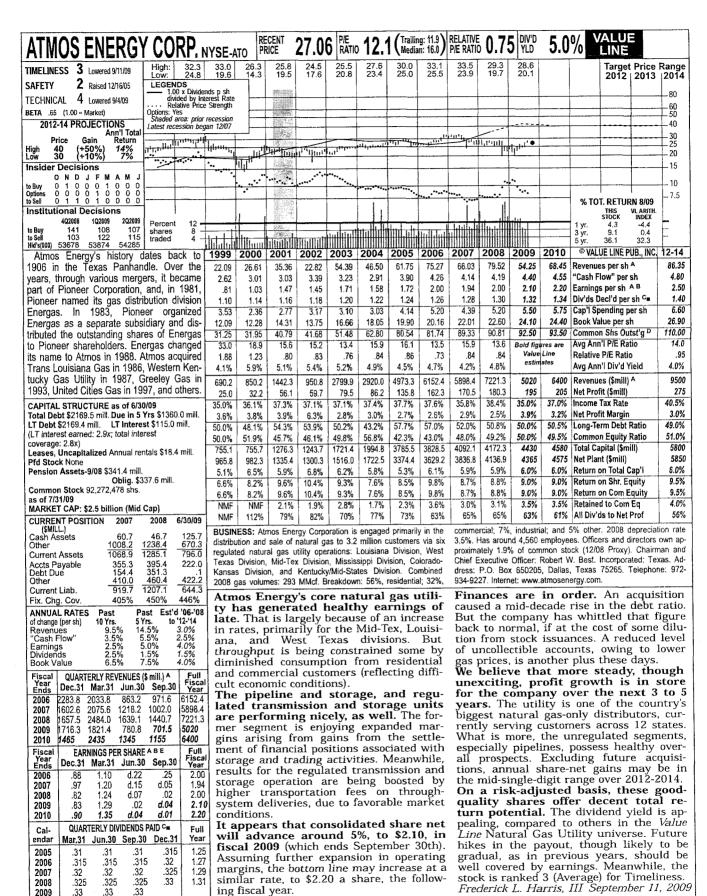
issue features decent risk-adjusted to-

tal return potential.

Michael Napoli, CPA

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September 11, 2009

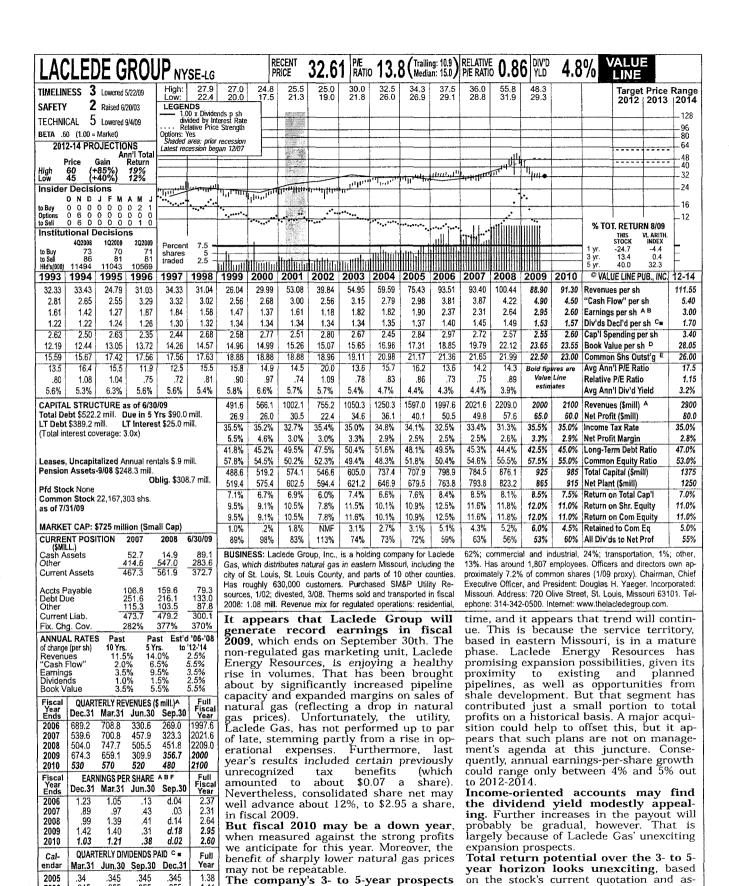


(A) Fiscal year ends Sept. 30th. (B) Diluted shrs. Excl. nonrec. items: '99, d23¢; '00, 12¢; '03, d17¢; '06, d18¢; '07, d2¢; Q2 '09, 12¢. Next egs. rpt due early Nov. (C) Dividends his-

torically paid in early March, June, Sept., and Dec. Div. reinvestment plan. Direct stock purchase plan avail. (D) In millions.

Company's Financial Strength Stock's Price Stability Price Growth Persistence 100 Earnings Predictability

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.385 .385 (A) Fiscal year ends Sept. 30th. (B) Based on average shares outstanding thru. '97, then diluted. Excludes nonrecurring loss:

'06, 7¢. Excludes gain from discontinued oper-

.355

365

.375

2006

2007

2008

2009

.345

.365 .375

.355 .365

.375

.385

.355

365

.375

1.41

1.46

ations: '08, 94¢. Next earnings report due late Oct. (C) Dividends historically paid in early January, April, July, and October. ■ Dividend reinvestment plan available. (D) Incl. deferred charges in '08: \$340.4 mill., \$15.48/sh. (E) In millions. (F) Qtly. egs. may not sum due to rounding or change in shares outstanding.

look unspectacular. Annual customer

growth for the natural gas distribution

unit has been only around 1% for some

tion.

Company's Financial Strength Stock's Price Stability Price Growth Persistence Earnings Predictability

suming minimal growth in the distribu-

Frederick L. Harris, III September 11, 2009

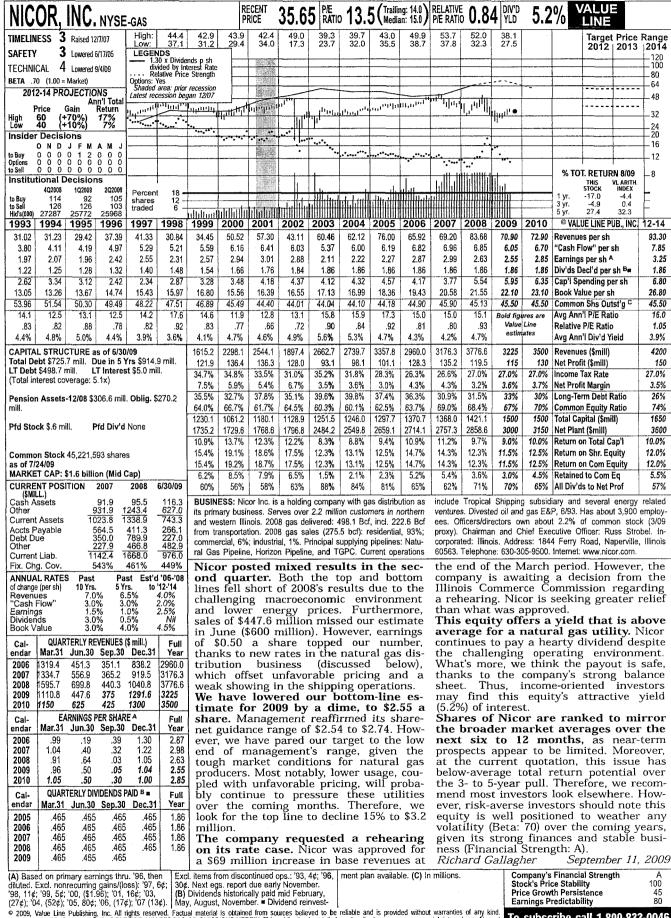
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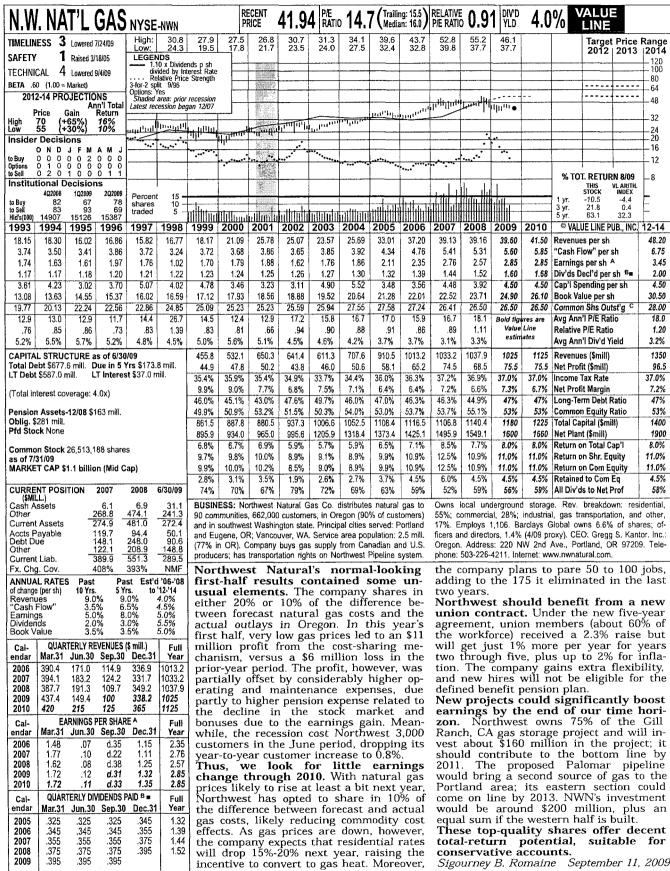
R+

100

		RSE		<b>ES.</b> N	YSE-N	IJR	PF		36.6			<b>∠</b> \ Media	in: 15.0 /	RELATIVE P/E RATIO	0.00	YLD	3.4	%	ALUI LINE		
		Lowered	1	High: Low:	17.9 14.0	18.3 14.9	19.8 16.1	21.7 16.6	22.4 16.2	26.4 20.0	29.7 24.3	32.9 27.1	35.4 27.7	37.6 30.3	41.1 24.6	42.4 30.0				Price 2013	
AFETY		•		LEGEN 1.4	NDS 10 x Divide	nds p sh									_						80
ECHNI Eta	ICAL = 0 55 (1.00 =	Lowered !  Market)	9/11/09	Re 3-for-2 sp	lative Price Iit 3/02	nds p sh terest Rate e Strength															60
		OJECTIC		3-for-2 sp Options: \	lit 3/08 Yes										3-for-2.		===				$\pm \frac{50}{40}$
		Gain	n'i Total Return		area: prior cession beç		-	-	3-for-2		71.71	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	111111111111111111111111111111111111111		11111111111	 					30
ligh .ow	45 (· 35	+25%) (-5%)	8% 2%					THE OWNER OF THE OWNER OWNE	10-2 111,1111	Pizz, 114.11	111412										20
nside	r Decis		A M J		1111111111	1,131,11,11,11	<del>Histo</del> ili.	111.	••••		<del> </del>				**	•					15
o Buy	0 N D	0 0 0	0 1 0				********	•••		*******		********	······			···.		ļ			<b>1</b> 0
o Sell	1 2 3		0 0 0					•				-			1116	11111		% TO	T. RETUR		7.5
nstitu	tional 1 4Q2008	Decision 1Q2009	1S 2Q2009	Percent	l t 12 <b>–</b>										11				STOCK	VL ARITH. INDEX	_
to Buy to Sell	93 73	87 88	89 88	shares	8 - 4 -	-				H. I.II.	414114	111111111						1 yr. 3 yr.	5.2 22.5	-4.4 0.4	
Hld's(000) 1993		23324	24695 <b>1996</b>	1997	1998	1999	Որևկի 2000	111111111 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	5 yr. © VAL	58.6 UE LINE P	32.3 UB., INC.	12-1
12.02	12.81	11.36	13.48	17.31	17.73	22.65	29.42	51.22	44.11	62.29	60.89	76.19	79.63	72.62	90.74	65.90	81.40		es per sh		85.0
1.42	1.54	1.42	1.48	1.63	1.74	1.86	1.99	2.12	2.14	2.38	2.50	2.62	2.73	2.44	3.62	3.35	3.60		low" per		3.7
.76 .68	.84	.86 .68	.92 .69	.99 .71	1.04	1.11	1.20 .76	1.30 .78	1.39	1.59	1.70	1.77	1.87	1.55 1.01	2.70	2.45 1.24	2.70 1.28		s per sh <sup>E</sup> Iecl'd per		2.8
1.54	1.40	1.18	1.19	1.15	1.07	1.21	1.23	1.10	1.02	1.14	1.45	1.28	1.28	1.46	1.72	1.75	1.75	Cap'l Sp	ending p	er sh	1.8
6.54	6.43	6.47	6.73 40.69	6.92 40.23	7.26	7.57 39.92	8.29 39.59	8.80 40.00	8.71 41.50	10.26 40.85	11.25 41.61	10.60	15.00 41.44	15.50 41.61	17.28 42.06	18.80 42.50	20.75 43.00		ilue per si n Shs Ou		27.4 45.0
37.84 15.1	38.93 13.0	40.03	13.6	13.5	15.3	15.2	14.7	14.2	14.7	14.0	15.3	16.8	16.1	21.6	12.3	Bold fige			i'l P/E Rai		14.
.89	.85	.79	.85	.78	.80	.87	.96	.73	.80	.80	.81	.89	.87	1.15	.77	Value estim		3	P/E Ratio	- 1	2,
5.8%	6.2%	6.7%	5.6%	5.3%	4.6%	4.5%	4.4%	4.2%	3.9%	3.7%	3.3%	3.1%	3.2%	3.0% 3021.8	3.3%	2800	3500	<del></del>	ı'l Div'd Y es (\$mill)		3.65
		CTURE a			6 mill.	904.3 44.9	1164.5 47.9	2048.4 52.3	1830.8 56.8	2544.4 65.4	2533.6 71.6	3148.3 74.4	3299.6 78.5	65.3	3816.2 113.9	80.0	105	Net Prof			12
	t \$457.7	mill. L apitalized	T Interes	it \$16.9 n	nill.	36.2%	37.8%	38.0%	38.7%	39.4%	39.1%	39.1%	38.9%	38.8%	37.8%	39.0%	39.0%	Income	Tax Rate		40.0
(LT inte		ned: 4.8x;		rest cover	rage:	5.0% 48.7%	4.1%	2.6% 50.1%	3.1% 50.6%	2.6 <b>%</b> 38.1 <b>%</b>	2.8% 40.3%	2.4% 42.0%	2.4% 34.8%	2.2% 37.3%	3.0% 38.5%	3.7% 38.5%	3.3% 37.0%		it Margin rm Debt I	Patio	3.39
4.8x) Pensio	n Assets	s-9/08 \$8	0.6 mill.			51.2%	52.9%	49.9%	49.4%	61.9%	59.7%	58.0%	65.2%	62.7%	61.5%	61.5%	1		n Equity F		68.0
Df4 614	ock None		O	blig. \$102	2.4 mill.	590.4	620.1	706.2	732.4	676.8	783.8	755.3	954.0	1028.0	1182.1	1300	1415	1	pital (\$mi	R)	181
						705.4	730.6 9.0%	743.9 8.5%	756.4 8.7%	852.6 10.7%	880.4	905.1	934.9	970.9 7.7%	1017.3	9.0%	9.0%	Net Plan	nt (\$min) on Total C	ap'i	8.09
Comm as of 8		c 42,014,7	73 shs.			14.8%	14.6%	14.8%	15.7%	15.6%	15.3%	17.0%	12.6%	10.1%	15.7%	13.0%	13.0%	Return o	on Shr. Ed	uity	10.09
		\$1.5 billi				14.8%	14.6%	14.9%	15.7%	15.6%	15.3%	17.0% 8.5%	12.6%	10.1%	15.7% 9.5%	13.0% 6.5%	13.0% 7.0%		on Com E d to Com		10.0
(SM	ENT POS ILL.)	SITION	2007		6/30/09	5.0% 67%	5.4% 63%	6.1% 59%	6.9% 56%	7.7% 51%	7.8% 49%	50%	6.3% 50%	64%	40%	50%	47%		is to Net I		5.0
Cash / Other				42.6 067.1	77.0 636.5	BUSIN	ESS: Ne	w Jerse	y Resour	ces Cor	p. is a h	nolding co	ompany		ctric utility						
Currer	t Assets	, 7	799.9 1	109.7	713.5							s in New nd, and (			rgy subsid I related e						
Accts I Debt D	Payable		64.4 260.8	61.7 238.3	49.2 54.6	New Je	ersey Na	tural Gas	had abo	out 484,0	000 custo	omers at	9/30/08	Off./dir.	own abo	ut 1.7%	of comm	on (12/0	9 Proxy)	. Chrmn	1., CÉC
Other			<u>378.1</u>	594.0	475.9 579.7							Counties ruptible ir			: Laurend : 07719.						
	nt Liab. ng. Cov.			894.0 450%	450%							tom			c hea						
	AL RATE			st Est'o	d '06-'08 '12-'14	has	beer	ı ĭmj	orovi	ng de	espite	e wea	aker	trim	a nio	ckel o	off ou	r 200	09 ea	rning	s es
Reven	je (per sh) ues	10 Yrs 17.5	i% 9.	.0%	1.0%							ıpany': er volu			te to it a de						
Earnin	Flow"	6.0 7.5	5% 7.	.5%	4.0% 5.5%	duri	ng th	e Jun	e peri	iod. T	he N.	JR Er	ergy	view	this l	argel	y as a	a tech	micali	ty, du	ue to
Divide Book \		4.0 8.5	5% 11.		5.5% 9.5%							ontrib as hit			year's						
Fiscal Year	QUAR	TERLY RE			Full	1	lest o	n bot	had	lollar-	-value	and	per-	fund	ament	als of	f its l	busine	ess th	rough	h the
Ends 2006	Dec.31	1064	Jun.30 536.1	535.5	Fiscal Year 3299.6							atural s also			nsion widen					ets an	nd an
2007	737.4	1029	662.2	593.2	3021.8							uble d			ital p					struc	ture
2008 2009	811.1	1178 937.5	1000 441.1	827.1 <b>620.1</b>	3816.2 2800							be a			rams						
2010	845	985	790	880	3500							rices vatio			<b>pects</b> ty ha						
Fiscal Year	D 2	RNINGS P			Full Fiscal	forts	s, as	const	imers	conti	inue	to rea	al in		nvent						
Ends 2006	Dec.3	1 Mar.31 1.43	d.09	Sep.30 d.29	Year 1.87	sper						ase co atura			winte: : maki						
2007	.70	.19	.60	.06	1.55	divis	sion h	as ac	lded a	lmost	4,200	o new	cus-	butio	ns ne	xt yea	ar. An	d the	other	prog	ram
2008 2009	1.31	1.86 1.71	d.10 .03	d.39 d.06	2.70 2.45	plet						and gas			ld pro Isly bo						
2010	.85		d.05	.15	2.70							any r		of th	e disti	ributi	on sys	stem.			
Cal- endar	QUAR Mar.3	TERLY DIV	IDENDS P. Sep.30		Full Year						d ear	rnings	for		se hig incon						
2005	.227	.227	.227	.227	.91	- LIIC			m. Bu or <b>Se</b> p		er's	share	net		stan						
2006	.24	.24	.24	.24	.96	to	fall	into	nega	tive	terri	tory.	The	for	the p	ull to	201	2-201	4, cor	npare	ed t
2007 2008	.253 .267	.253 .28	.253 .28	.253 .28	1.01	anici	cipate	d los	s dur ed to	ing t	ne fis easona	scal fo al natu	ourth ire of		: utilit : solid						.ome
2009	.31	.31	.31			l qua.	natur	al gas	busir	iess. I	Vonet	heless	, eco-		an J. F		6		ptemb		, 200
;	- <del></del>	ande Sen	t. 30th.		(C)	Dividend	s historic	ally paid				\$8.09/sha				Co	mpany's	Financi	al Streng	jth	A
(A) Fis											17-1	- 910 -									
(B) Dili	ited earn	ings. Qtly	egs may		to Api	ril, July, a int plan av		er. = Div	idend reir		(E) In m	nillions, ac tated.		or splits.		Sto Pri	ock's Pri ice Grow	ce Stabi rth Persi	lity stence		100 65
( <b>B</b> ) Dilu iotal du earninc	ited earn ie to chai is report		r egs may ares outst Oct.	anding. N	to Apri Next me (D)	nt plan av Includes	vailable. regulato	ry assets	in 2008:	vest- \$340.7	(F) Res	tated.	djusted fo		s of anv ki	Sto Pri Ea	ock's Pri ice Grow rnings P	ce Stabi rth Persi redictab	lity stence		65 45



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(A) Diluted earnings per share. Excludes non-recurring items: '98, \$0.15; '00, \$0.11; '06, (\$0.06); '08, (\$0.03); 1Q '09, 6¢. Next earnings report due early November.

May, August, and November.

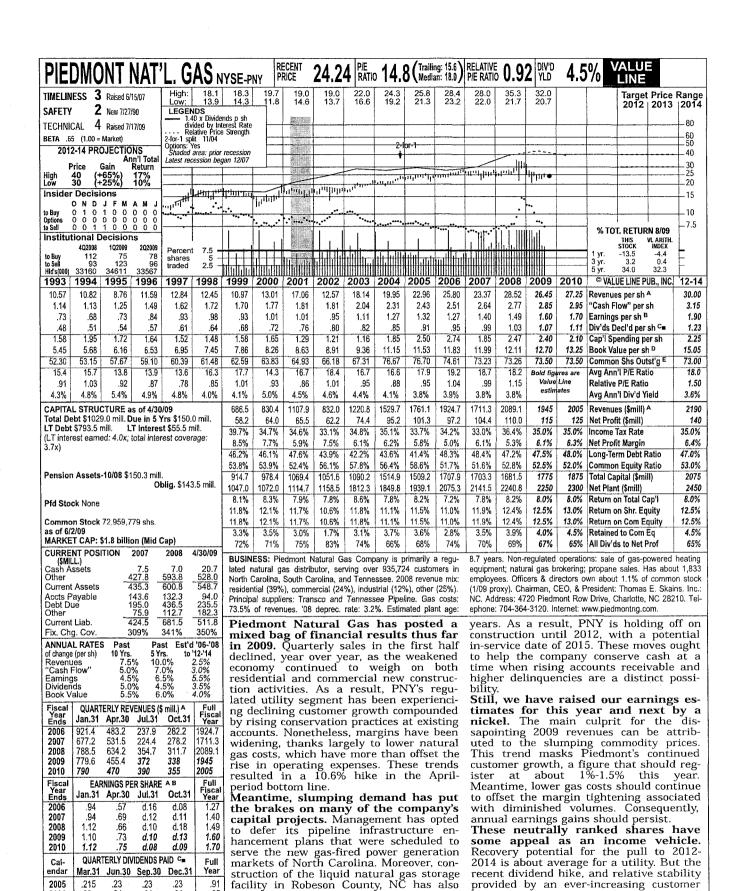
Dividend reinvestment plan available.

(B) Dividends historically paid in mid-February, (C) In millions, adjusted for stock split.

Company's Financial Strength
Stock's Price Stability
Price Growth Persistence
Earnings Predictability

A
70
90

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27 (A) Fiscal year ends October 31st (B) Diluted earnings. Excl. extraordinary item: '00, 8¢. Excl. nonrecurring charge: '97, 2¢. Next earnings report due early Nov. Quarters

.24

.25

.26

.23

.24

.26

2006

2007

.24

.25

.26

.24

.25

.95

1.03

may not add to total due to change in shares

been put off. Current customer growth projections in that region indicate this fa-

cility may not be necessary for a few more

outstanding.
(C) Dividends historically paid mid-January, April, July, October.

■ Div'd reinvest. plan available; 5% discount. (D) Includes deferred charges. In 2008: \$16.3

quality stock.

Bryan J. Fong

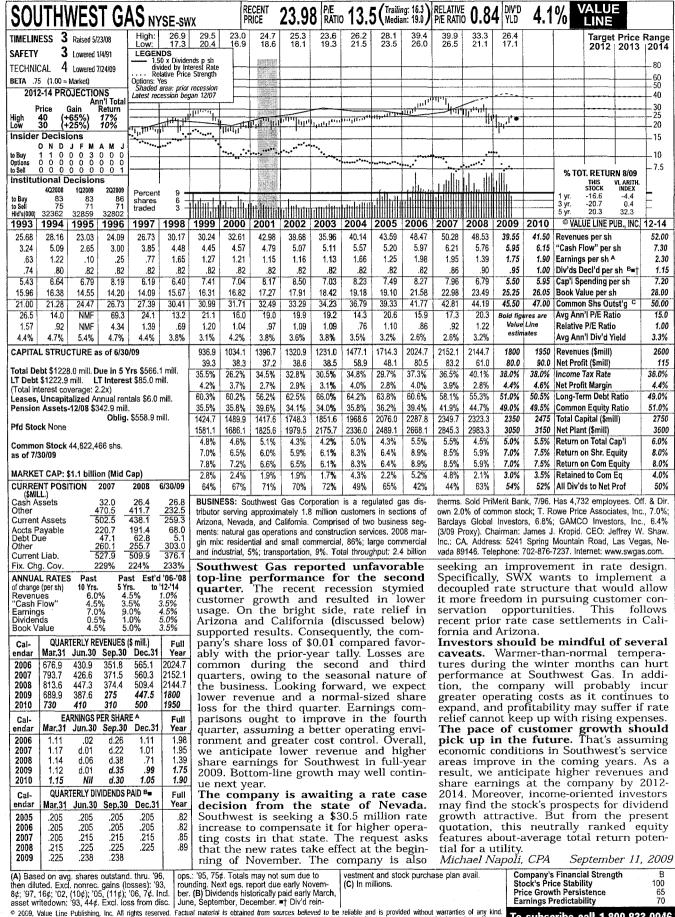
million, 22¢/share. (E) In millions, adjusted for stock split. Company's Financial Strength Stock's Price Stability Price Growth Persistence 100 **Earnings Predictability** 90

base, shines a positive light on this good-

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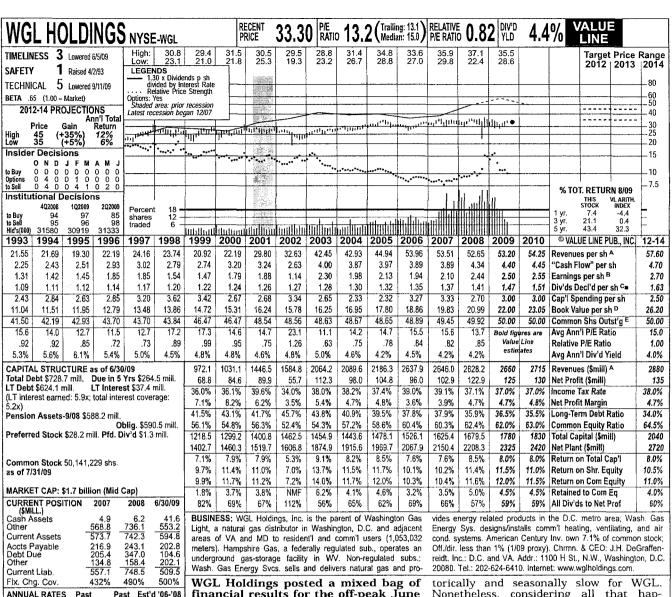
September 11, 2009

JUL	JTH	<b>JER</b>	SEY	IND	S. NY	/SE-sJI	RI	ECENT RICE	34.29	P/E RATIO	14.	3 (Trailir Media	ng: 14.8 <b>)</b> an: 14.0 <b>)</b>	RELATIVE P/E RATIO		9 DIV'D	3.6	%	VALUI LINE	_	
IMELIN	_	Lowered		High: Low:	15.4 11.0		15.1 12.3	17.0 13.8	18.3 14.1	20.3 15.3	26.5 19.7	32.4 24.9	34.3 25.6	41.3 31.2	40.6 25.2	40.8 32.0				t Price   2013	
SAFETY		Lowered		LEGEN	NDS 10 x Divide															20.0	80
ECHNIC	CAL 0 5 (1.00 =	Lowered :	9/11/09	2-for-1 sp	nded by In elative Pric lit 7/05	ends p sh iterest Rate e Strength						2-for-									60
		OJECTIC		Options: \ Shaded	Yes <i>area: prio</i> i	r recession						+		7(1)	-10.00		~ ~				$\pm \frac{50}{40}$
		Gain	n'i Total Return	Latest red	ession be	gan 12/07						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	السلاليييا	الللال ال	: t1    1	ւլիւրը ●					30
.ow	35	+45%) (NII)	13% 5%						1111	1,11,11,						••					20
	Decisi O N D		A M J	11,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1111 11111	,,,( <sup>(1)</sup> ),,,	111+11111111111111111111111111111111111	ه. برنا <sup>را</sup> ل.	11!									†		15
options	0 0 1	0 0 0	0 0 0	******	••		٠			********									+	-	10 7.5
		0 0 4 Decision					*****		•									% TC	T. RETUR	N 8/09 VL ARITH.	1
o Buy	4Q2008 75 69	1Q2009 73	2Q2009 70	Percen	t 15 =								11					1 yr.	STOCK 0.4	-4.4	E
o Seli Ild's(000)	16545	70 16545	78 15858	traded	5 -	اباللابين	ninlaha M	السيطا	սիրիոյի	անուհիկ								3 yr. 5 yr.	31.1 79.3	0.4 32.3	<u>. L</u>
993	<b>1994</b> 17.45	<b>1995</b>	<b>1996</b>	1997 16.18	1998 20.89	1999 17.60	2000 22.43	<b>2001</b> 35.30	2002	2003 26.34	29.51	<b>2005</b> 31.78	<b>2006</b> 31.76	<b>2007</b> 32.30	<b>2008</b> 32.36	2009 30.85	2010 31.60		.UE LINE P les per sh		12-1- 36.3
17.03 1.54	1.35	1.65	1.54	1.60	1.44	1.84	1.95	1.90	2.12	2.24	2.44	2.51	3.51	3.20	3.48	3.35	3.60		low" per		4.2
.78 .72	.61 .72	.83 .72	.85 .72	.86 .72	.64 .72	1.01	1.08	1.15	1.22 .75	1. <b>3</b> 7	1.58	1.71	2.46 .92	2.09	2.27 1.11	2.40 1.20			ıs per sh Decl'd per		3.1
1.87	1.93	2.08	2.01	2.30	3.06	2.19	2.21	2.82	3.47	2.36	2.67	3.21	2.51	1.88	2.08	2.35	2.40	Cap'l S	pending p	er sh	2.9
7.17	7.23	· 7.34	8.03 21.51	6.43	6.23 21.56	6.74	7.25	7.81	9.67	11. <b>2</b> 6	12.41 27.76	13.50	29.33	16.25	17.33 29.73	18.65 30.00	19.35 31.00		alue per s on Shs Ou		33.0
15.8	16.1	12.2	13.3	13.8	21.2	13.3	13.0	13.6	13.5	13.3	14.1	16.6	11.9	17.2	15.9	Bold fig	ures are	Avg An	n'i P/E Ra	tio	14
.93 5.9%	1.06 7.4%	.82 7.2%	.83 6.4%	.80 6.1%	1.10 5.3%	.76 5.4%	.85 5.2%	.70 4.7%	.74 4.6%	. <b>7</b> 6 4.3%	.74 3.7%	.88	3.2%	.91 2.8%	.95 3.1%	Value estin		1	e P/E Ratio n'I Divid Y		3.5
		CTURE a			3.576	392.5	515.9	837.3	505.1	696.8	819.1	921.0	931.4	956.4	962.0	925	980	<del> </del>	es (\$mill)	- Ioru	120
	bt \$496 \$332.7			Yrs \$228. st \$16.0 n		22.0	24.7	26.8	29.4	34.6	43.0	48.6	72.0	61.8	67.7	70.0		+	fit (\$mill)		100
		overage: 8		σ <b>ι</b> ψ 10.0 π		42.8% 5.6%	43.1% 4.8%	42.2% 3.2%	41.4% 5.8%	40.6% 5.0%	40.9% 5.2%	41.5% 5.3%	41.3% 7.7%	41.9% 6.5%	47.7% 7.0%	38.0% 7.6%	40.0% 8.2%	1	Tax Rate fit Margin		40.0 8.3
						53.8%	54.1%	57.0%	53.6%	50.8%	48.7%	44.9%	44.7%	42.7%	39.2%	38.5%	40.0%		erm Debt I		38.0
		s-12/08 \$8		blig. \$142	2.7 mill.	37.0% 405.9	37.6% 443.5	35.9% 516.2	46.1% 512.5	49.0% 608.4	51.0% 675.0	55.1% 710.3	55.3% 801.1	57.3% 839.0	60.8% 848.0	61.5% 910	60.0% 1000		on Equity I apital (\$m		62.0
fd Sto	ck none					533.3	562.2	607.0	666.6	748.3	799.9	877.3	920.0	948.9	982.6	1030	+		nt (\$mill)	· >!!	12
commo s of 8/3		29,796,2	32 comn	non shs.		7.4%	7.4% 12.1%	6.9%	7.6% 12.4%	7.3% 11.5%	7.9% 12.4%	8.3% 12.4%	10.1% 16.3%	8.6% 12.8%	8.5% 13.1%	8.5% 12.5%	9.0% 13.5%		on Total C on Shr. Ed	•	9.0 13.5
		\$1.0 billi	on (Mid A	Can\		14.6%	14.8%	12.8%	12.5%	11.6%	12.5%	12.4%	16.3%	12.8%	13.1%	12.5%			on Com E		13.5 6.5
URRE	NT POS		2007		6/30/09	4.2% 72%	4.8% 67%	3.5% 76%	4.7% 62%	5.0% 57%	5.9% 52%	6.2% 50%	10.2% 37%	6.7% 48%	6.7% 49%	6.0% 51%	6.5% 50%	!	d to Com ds to Net		50
\$Mil. Cash A	.L.) ssets		11.7	5.8	6.0				y Industri										ersey Re		
Other Current	Assets		316.6 328.3	429.3 435.1	351.4 357.4				ey Gas New Jer										y Service shares;		
Debt Du	ayable ue	•	101.2 118.4	120.2 237.6	87.9 163.7				rare miles										oxy). Chr uth Jerse		
Other Current	Liab.		108.7 328.3	142.1 499.9	$\frac{135.7}{387.3}$				6%; indu										ww.sjindu		
ix. Ch			76%	598% st Est'o	834%				Indus					resul well.	ts fro	m th	e non	utilit	y oper	ation	ıs, a
of change	L RATE (per sh)	10 Yrs	. 5 Y	rs. to	12-114	earı	nings	for t	ariso he sec	cond	quar	ter. E	larn-	Sout					filed		
Revenu "Cash I	Flow"	6.0 8.5 11.5	% 10	.0%	2.0% 3.5% 5.5%				modei Gas in										<b>'ublic</b> %. The		
Earning Dividen Book V	ds	3.5	6 %	.0%	7.0% 6.0%	Low	er int	erest	paym	ents v	were:	more	than	of th	ie Ba	sic G	as Šu	pply	Servi	ce (B̈́	GSS
Cal-		RTERLY RI			Full				r pen: ier op										omers rovide		
ndar	Mar.31	Jun.30	Sep.30	Dec.31	Year	busi	ness.	Mear	ıwhile	, sigr	ificar	ntly c	ooler	tive	for ho	omeov	vners	to sv	vitch f clau	rom	oil t
2006 2007	372.6 368.4	153.8 171.7	154.7 156.2	250.3 260.1	931.4 956.4	lowe	r ai	ir co	uring Inditio	ning	dem	nand	and	Sout	h Jer	sey to	pass	alor	ig incr	reases	s an
2008 2009	348.1 362.2	135.8 134.5	210.4 <b>150</b>	267.7 <b>278.3</b>	962.0 925	1			igs at iness,										directl bility		
2010	365	160	170	285	980	Asse	et Ma	nager	nent :	and N	Marke	eting	busi-	lowe	r-price	ed gas	has	allov	ed it		
Cal- endar		ARNINGS   Jun.30		RE A Dec.31	Full Year		also guarte		ed an	earn	ings	declin	e for				the lo outh		rates. ey I:	ndus	trie
2006	1.06	.20	.51	.69	2.46	The	com	pany	has a					have	e slip	ped o	one n	otch	in Ti	meli	ness
2007 2008	1.30	.21 .26	d.05 .04	.63 .67	2.09 2.27	at S	tne c South	Jerse	g yea y Gas	rs. C has	uston conti	ner gr inued	at a						anked ing fu		
2009 2010	1.46 1.45	.15 . <b>25</b>	.05 .10	.74 .85	2.40	stea	.dy c	lip, (	despite	e we	aknes	ss in	the	we a	anticiț	oate [b	uigher	reve	nues by	and :	shar
Cal-	+	RTERLY DI	VIDENDS	PAID B	Full	fuel			ıy. Nat ı the r					More	eover,	SJI	scor	es h	igh r	narks	s fo
ander	Mar.31			Dec.31	Year				JG co t in co										TEarı prese		
		.213 .225	.213	.438	.92	fuel	sour	es to	natur	al ga	s. Its	recen	t gas	tion,	this	issue	has b	elow	avera	ge, tĥ	noug
2005 2006	1	.245	.245 .270	.515 .568	1.01	mai	n exte	ension	proje effort	ct, alc	ng w	ith ag	gres-				ell-def e comi		tota ears.	al r	etur
2005 2006 2007		.270	.210			1 SIVE															20
2005 2006 2007 2008 2009	1	.270 .298	.298			utili	ity go	ing fo	rward	. We	antic	ipate	solid	Mici	iael N	lapoli,	: CPA	Si	eptemb	<i>er 11</i>	, 200
2005 2006 2007 2008 2009 A) Base	 ed on G	.298 AAP EPS	.298 through	2006, ec	o- dis	cont. ops	.: '99, (\$0	0.02); '00	(\$0.04);	01,	vember	. (B) Div'o	ds paid e	arly Apr.,	Jul., Oct	., Co	mpany's	Financ	ial Stren		B+-
2005 2006 2007 2008 2009 A) Base omic ed 2.10; '0	ed on Garnings 108, \$2.58	.298 AAP EPS thereafter 3. Excl. n	.298 through . GAAP I		s): (\$0 106		.: '99, (\$0 (\$0.04); '07, \$0.0	).02); '00 '03, (\$0.0 )1. Earnir	(\$0.04); 09); '05, (\$ ngs may n	01, 0.02); ot sum	vember and late Incl. reg	. (B) Div'o e Dec. ■ I gulatory a	ds paid e Div. reinv ssets. In		Jul., Oct evail. (C) 70.4 mill.	., Co		Financice Stab	ial Stren ility istence		



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ANNUAL RATES Past 10 Yrs. Past Est'd '06-'08 of change (per sh) Revenues "Cash Flow" 5 Yrs. to '12-'14 8.5% 3.5% 2.0% 1.5% 2.5% 4.0% Earnings Dividends Book Value 4.0%

Fiscal Year Ends QUARTERLY REVENUES (\$ mill.) A Feell Dec.31 Mar.31 Jun.30 Sep.30 2637.9 2006 902.9 1064.5 346.9 323.6 325.7 2646.0 2007 732 9 1119.9 467.5 464.7 751.6 1020.0 391.9 2628. 2008 427.0 1040.9 370.6 1050 445 2715 2010 830 390 Fiscal Year Ends Full EARNINGS PER SHARE A B Fiscal Year Dec.31 Mar.31 Jun.30 Sep.30 2006 d.01 d.15 2007 92 1 27 22 d 31 2 10 2008 96 1.66 n6 d 24 2.44 1.65 .11 d.29 2.50 2009 1.03 2010 1.04 1.66 .12 d.27 2.55 QUARTERLY DIVIDENDS PAID C = Full Calendar Mar.31 Jun.30 Sep.30 Dec.31 2005 1.32 325 333 333 333 .338 338 338 1.34 2006 333 .34 .34 .34 1.36 2007 .34 .36 .36 .36 2008

financial results for the off-peak June period. Top-line volumes fell approximately 8% over that time frame. This stemmed from weakness at the regulated utility segment, which has been dealing with lower natural gas consumption and some equipment cost issues. On a brighter note, the retail energy marketing division got a boost to its revenues and earnings contributions from higher natural gas and electricity margins. On the efficiency front, management has been performing well. Operating expenses declined 90 basis points versus the year-ago period. This stemmed from lower labor and benefits expenses. All told, the bottom line advanced nicely.

We look for the company to register a mid-single-digit earnings hike this year. The decent gains experienced earlier in 2009 will probably be offset by a larger share deficit in the fiscal fourth quarter. Despite the widening margins and solid performance from the retail energy and design build segments, demand at the mainstay regulated utility business may be soft. Also, the September period is hisNonetheless, considering all that happened in the past year, the company appears to be in solid shape.

The LNG peaking facility is going to take longer than expected to be completed and put into service. That project will be used to support customer growth and maintain the pressure requirements of the distribution system in Chillum, MD. It was planned to be in service by the 2012-2013 winter heating season, but due to regulatory and legal issues, the following year is more likely.

These top-quality shares may appeal to income-oriented accounts, as they offer an attractive dividend yield. Typically, too, they proved much less volatile than the broader market during the recent turmoil. This partly stems from WGL's large government business in the DC metro area, which has been less affected by the economic downturn. These benefits are evident in the equity's top-notch Safety rank, and high mark for Price Stability. But appreciation potential is subpar for the pull to 2012-2014.

September 11, 2009 Bryan J. Fong

(A) Fiscal years end Sept. 30th. (B) Based on diluted shares. Excludes non-recurring losses: '01, (13¢); '02, (34¢); '07, (4¢) discontinued operations: '06, (15¢). Qtly egs.

.37

.37

.36

may not sum to total, due to change in shares outstanding. Next earnings report due late Oct.

(C) Dividends historically paid early February, May, August, and November. 

Dividend rein
Westment plan available.

(D) Includes deferred charges and intangibles.

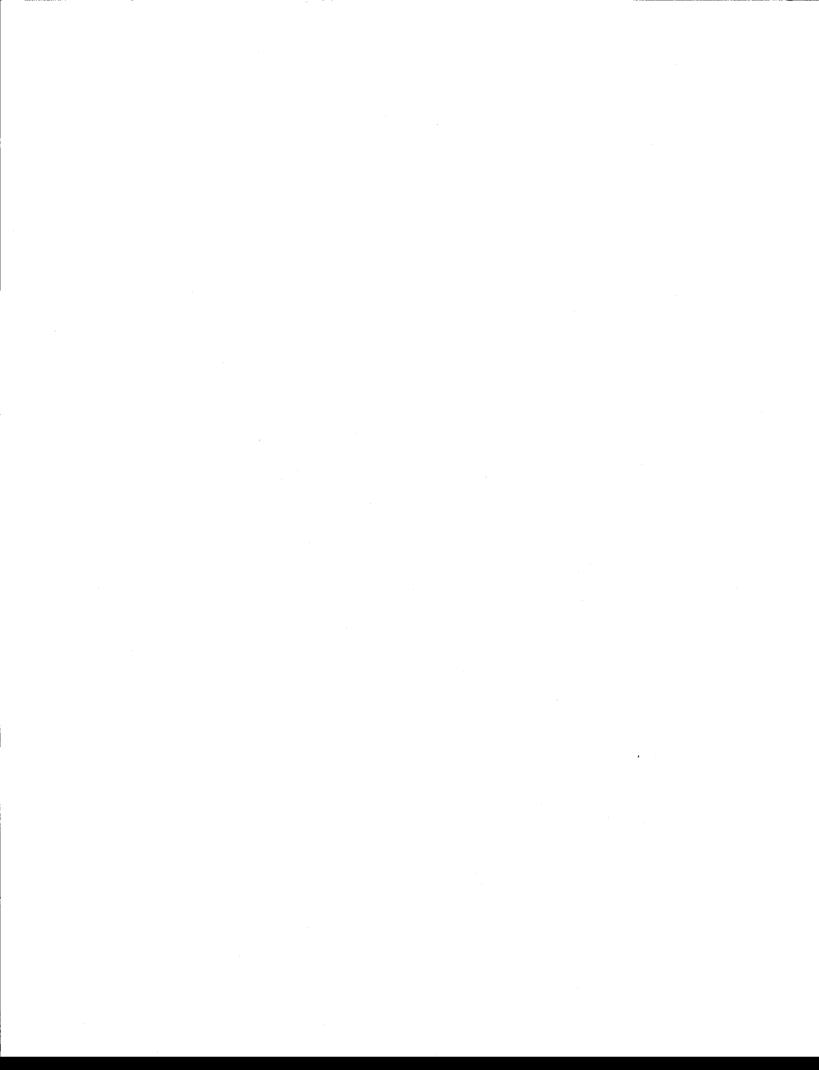
(8: \$291.3 million, \$5.81/sh.

(E) In millions, adjusted for stock split.

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Company's Financial Strength Stock's Price Stability 100 Price Growth Persistence Earnings Predictability

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# **ATTACHMENT C**



Proven Ratings, Research & Recommendations Zacks.com Quotes and Research

AMERICAN STS WTR CO (NYSE)

(-0.42%)

16:01 ET

American States is a public utility company engaged principally in thepurchase, production, distribution and sale of water. The company also distributes electricity in some communities. In the customer service areas for both water and electric, rates and operations are subject to the jurisdiction of the California Public Utilities Commission.

# **General Information**

AMER STATES WTR

630 East Foothill Boulevard San Dimas, CA 91773-1212 Phone: 909 394-3600

Fax: 909 394-0711 Web: www.gswater.com

Email: investorinfo@aswater.com

Industry

**UTIL-WATER** 

SPLY

Sector:

Utilities

Fiscal Year End Last Reported Quarter

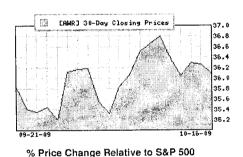
Next EPS Date

December 09/30/09

11/05/2009

### Price and Volume Information

Zacks Rank	Â <b>H</b>
Yesterday's Close	36.08
52 Week High	38.79
52 Week Low	27.00
Beta	0.36
20 Day Moving Average	55,833.50
Target Price Consensus	40.33



### % Price Change

Share Information		Dividend Information	
YTD	9.40	YTD	-9.15
12 Week	-1.23	12 Week	-11.08
4 Week	-0.28	4 Week	-2.05

# Share Information

Share imormation		Dividend intermediation	
Shares Outstanding	18.50	Dividend Yield	2.77%
(millions)	10.50	Annual Dividend	\$1.00
Market Capitalization (millions)	667.44	Payout Ratio	0.00
Short Ratio	6.71	Change in Payout Ratio	0.00
	0.7 ;	Last Dividend Payout / Amount	08/07/2009 / \$0.25
Last Split Date	06/10/2002	East Dividend 1 Lyout 7 throat.	05/01/2000 / 40/20

## **FPS Information**

## Consensus Recommendations

Ero miornation		Odildeliada licodimilationalia.ie	
Current Quarter EPS Consensus Estimate	0.55	Current (1=Strong Buy, 5=Strong Sell)	1.67
Current Year EPS Consensus Estimate	1.82	30 Days Ago	1.67
Estimated Long-Term EPS Growth Rate	4.00	60 Days Ago	2.33
Next EPS Report Date	11/05/2009	90 Days Ago	1.67

### **Fundamental Ratios**

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	19.85	vs. Previous Year	18.52%	vs. Previous Year	16.49%
Trailing 12 Months:	21.10	vs. Previous Quarter	128.57%	vs. Previous Quarter:	17.52%

**PEG Ratio** 

4.96

**Price Ratios** Price/Book

ROE 1.87 09/30/09 ROA

- 09/30/09

Price/Cash Flow	9.59	06/30/09	9.40	06/30/09	2.83
Price / Sales	-	03/31/09	9.02	03/31/09	2.68
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	1.10	06/30/09	1.08	06/30/09	8.83
03/31/09	0.82	03/31/09	0.80	03/31/09	8.51
Net Margin		Pre-Tax Margin		Book Value	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	10.59	06/30/09	10.59	06/30/09	19.31
03/31/09	9.75	03/31/09	9.75	03/31/09	18.01
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	51.08	06/30/09	0.87	06/30/09	46.39
03/31/09	52.72	03/31/09	0.98	03/31/09	49.56



CALIFORNIA WTR SVC GROUP (NYSE)

40.11 ≈ 0.55 Scottrade

16:02 FT

California Water Service Company's business, which is carried on through its operating subsidiaries, consists of the production, purchase, storage, purification, distribution and sale of water for domestic, industrial, public and irrigation uses, and for fire protection. It also provides water related services under agreements with municipalities and other private companies. The nonregulated services include full water system operation, and billing and meter reading services.

(1.39%)

# **General Information**

CALIF WATER SVC

1720 North First Street San Jose, CA 95112 Phone: 408 367-8200 Fax: 408 437-9185

Web: www.calwatergroup.com Email: klichtenberg@calwater.com

Industry

**UTIL-WATER** 

SPLY

Sector:

Utilities

Fiscal Year End

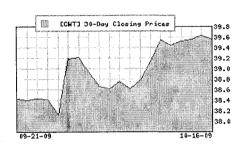
December

Last Reported Quarter Next EPS Date

09/30/09 10/28/2009

Price and Volume Information

Zacks Rank	12.
Yesterday's Close	39.56
52 Week High	48.28
52 Week Low	29.13
Beta	0.47
20 Day Moving Average	99,815.65
Target Price Consensus	47



% Price Change Relative to S&P 500

Vol. 144,240

%	Price	Change
---	-------	--------

4 Week	1.57	4 Week	-0.24
12 Week	5.07	12 Week	-5.40
YTD	-14.80	YTD	-29.24

### Share Information

	Dividend Information	
20.75	Dividend Yield	2.98%
20.75	Annual Dividend	\$1.18
820.67	Payout Ratio	0.00
5 48	Change in Payout Ratio	0.00
01/26/1998	Last Dividend Payout / Amount	08/06/2009 / \$0.29
		20.75 Dividend Yield Annual Dividend 820.67 Payout Ratio 5.48 Change in Payout Ratio

#### **EPS Information** Consensus Recommendations

Current Quarter EPS Consensus Estimate	1.05	Current (1=Strong Buy, 5=Strong Sell)	2.00
Current Year EPS Consensus Estimate	2.10	30 Days Ago	2.00
Estimated Long-Term EPS Growth Rate	8.20	60 Days Ago	2.00
Next EPS Report Date	10/28/2009	90 Days Ago	1.83

# **Fundamental Ratios**

P/E	EPS Growth	Sales Growth	
Current FY Estimate:	18.86 vs. Previous Year	20.83% vs. Previous Year	10.50%
Trailing 12 Months:	18.75 vs. Previous Quarter	383.33% vs. Previous Quarter:	34.70%
PEG Ratio	2.31		

Price Ratios		ROE		ROA	
Price/Book	2.02	09/30/09	-	09/30/09	-
Price/Cash Flow	10.25	06/30/09	10.94	06/30/09	3.12
Price / Sales	-	03/31/09	10.58	03/31/09	3.14
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	1.23	06/30/09	1.18	06/30/09	10.12
03/31/09	0.56	03/31/09	0.52	03/31/09	9.92
Net Margin		Pre-Tax Margin		Book Value	
<b>Net Margin</b> 09/30/09	_	Pre-Tax Margin 09/30/09	-	<b>Book Value</b> 09/30/09	-
•	16.26	•	16.26		- 19.56
09/30/09		09/30/09		09/30/09 06/30/09	
09/30/09 06/30/09	16.26	09/30/09 06/30/09	16.26	09/30/09 06/30/09	19.56
09/30/09 06/30/09 03/31/09	16.26 15.95	09/30/09 06/30/09 03/31/09	16.26	09/30/09 06/30/09 03/31/09	19.56
09/30/09 06/30/09 03/31/09 Inventory Turnover	16.26 15.95	09/30/09 06/30/09 03/31/09 Debt-to-Equity	16.26 15.95	09/30/09 06/30/09 03/31/09 Debt to Capital	19.56



Proven Ratinos, Research & Recommendations Zacks.com Quotes and Research

SOUTHWEST WATER CO (NASD)

(0.37%)

Vol. 48,024

16:00 ET

Scottrade

Southwest Water Company provides a broad range of utility and utility management services and serves people from coast to coast. Through its various subsidiaries, Southwest operates and manages water and wastewater treatment facilities along with providing utility submetering and billing and collection services.

#### **General Information**

SOUTHWEST WATER

One Wilshire Building 624 South Grand Avenue

Suite 2900

Los Angeles, CA 90017-3782 Phone: 213 929-1800

Fax: 626-915-1558

Web: www.southwestwater.com

Email: swwc@swwc.com

Industry

**UTIL-WATER** 

SPLY

Sector:

Utilities

Fiscal Year End

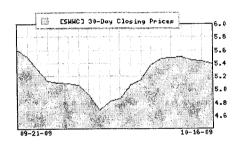
December 09/30/09

Last Reported Quarter Next EPS Date

12/19/2009

### Price and Volume Information

Zacks Rank	Â
Yesterday's Close	5.39
52 Week High	9.96
52 Week Low	2.67
Beta	0.60
20 Day Moving Average	125,904.65
Target Price Consensus	8.25



### % Price Change

% Price Change		% Price Change Relative to S&P 500	
4 Week	-4.77	4 Week	-6.47
12 Week	2.86	12 Week	-7.39
YTD	67.39	YTD	39.01

Share Information		Dividend Information	
Shares Outstanding	24.88	Dividend Yield	1.86%
(millions)	24.00	Annual Dividend	\$0.10
Market Capitalization (millions)	134.09	Payout Ratio	0.00
Short Ratio	3 17	Change in Payout Ratio	0.00
	10/00/0005	Last Dividend Payout / Amount	07/23/2009 / \$0.03
Last Split Date	12/20/2003		

Last Split Date

### Cancernius Decommendations

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	0.08	Current (1=Strong Buy, 5=Strong Sell)	2.20
Current Year EPS Consensus Estimate	0.17	30 Days Ago	2.50
Estimated Long-Term EPS Growth Rate	-	60 Days Ago	2.50
Next EPS Report Date	12/19/2009	90 Days Ago	2.50

# Eundamontal Datina

rungamental Ratios					
P/E	EP	S Growth		Sales Growth	
Current FY Estimate:	31.10 vs.	Previous Year	-25.00%	vs. Previous Year	-8.15%
Trailing 12 Months:	~ VS.	Previous Quarter	-%	vs. Previous Quarter:	0.05%
·					

**PEG Ratio Price Ratios** 

ROE

ROA

Price/Book	1.20	09/30/09	-	09/30/09	-
Price/Cash Flow	3.06	06/30/09	-27.86	06/30/09	-6.36
Price / Sales	-	03/31/09	-25.95	03/31/09	-6.30
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	-	06/30/09	-	06/30/09	-15.64
03/31/09	1.33	03/31/09	1.33	03/31/09	-15.27
Net Margin		Pre-Tax Margin		Book Value	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	-	06/30/09	-	06/30/09	-
03/31/09	-20.42	03/31/09	-20.42	03/31/09	4.48
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/09	-	09/30/09	_	09/30/09	_
06/30/09	-	06/30/09	-	06/30/09	-
03/31/09	-	03/31/09	1.78	03/31/09	63.88



#### AQUA AMERICA INC (NYSE)

(0.30%)

Vol. 1,076,433

Scottrade 16:00 ET

Aqua America is the largest publicly-traded U.S.-based water utility serving residents in Pennsylvania, Ohio, Illinois, Texas, New Jersey, Indiana, Virginia, Florida, North Carolina, Maine, Missouri, New York, South Carolina and Kentucky. The company has been committed to the preservation and improvement of the environment throughout its history, which spans more than 100 years.

#### **General Information**

AQUA AMER INC

762 W Lancaster Avenue
Bryn Mawr, PA 19010-3489

Phone: 610 527-8000 Fax: 610-645-1061

Web: www.suburbanwater.com

Email: ir.aquaamerica.com

Industry

UTIL-WATER

SPLY

Sector:

Utilities

Fiscal Year End

December

Last Reported Quarter

09/30/09

Next EPS Date 11/04/2009 Price and Volume Information

Zacks Rank	12
Yesterday's Close	16.65
52 Week High	22.00
52 Week Low	14.00
Beta	0.15
20 Day Moving Average	922,590.00
Target Price Consensus	22.14



ENTR3 30-Day Closing Prices 17.6 17.4 15.8

% Price Change		% Price Change Relative to S&P 500		
4 Week	-3.81	4 Week	-5.53	
12 Week	-7.71	12 Week	-16.91	
YTD	-19.14	YTD	-32.85	
Share Information		Dividend Information		

YTD	-19.14	YTD	-32.85
Share Information		Dividend Information	
Shares Outstanding	135 92	Dividend Yield	3.24%
(millions)	100.02	Annual Dividend	\$0.54
Market Capitalization (millions)	2,263.03	Payout Ratio	0.00
Short Ratio	22.71	Change in Payout Ratio	0.00
Last Split Date	12/02/2005	Last Dividend Payout / Amount	08/13/2009 / \$0.14

EPS Information	Consensus Recommendations

and announced			
Current Quarter EPS Consensus Estimate	0.26	Current (1=Strong Buy, 5=Strong Sell)	1.80
Current Year EPS Consensus Estimate	0.81	30 Days Ago	1.80
Estimated Long-Term EPS Growth Rate	7.50	60 Days Ago	1.80
Next EPS Report Date	11/04/2009	90 Days Ago	1.89

#### Fundamental Ratios

Last Split Date

I diluaniental rialios					
P/E	EPS Growth	Sales Growth			
Current FY Estimate:	20.63 vs. Previous Year	11.76% vs. Previous Year	11.00%		
Trailing 12 Months:	21.35 vs. Previous Quarter	35.71% vs. Previous Quarter:	8.32%		

PEG Ratio 2.75

ROA ROE **Price Ratios** 

Price/Book	2.10	09/30/09	-	09/30/09	-
Price/Cash Flow	11.68	06/30/09	9.95	06/30/09	3.04
Price / Sales	-	03/31/09	9.77	03/31/09	2.99
Current Ratio		Quick Ratio		Operating Margin	
09/30/09		09/30/09	-	09/30/09	-
06/30/09	0.60	06/30/09	0.55	06/30/09	15.97
03/31/09	0.60	03/31/09	0.55	03/31/09	15.87
Net Margin		Pre-Tax Margin		Book Value	
09/30/09	_	09/30/09	-	09/30/09	-
06/30/09	26.47	06/30/09	26.47	06/30/09	7.94
03/31/09	26.37	03/31/09	26.37	03/31/09	7.86
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	39.75	06/30/09	1.14	06/30/09	53.25
03/31/09	31.95	03/31/09	1.15	03/31/09	53.52



#### AGL RESOURCES INC (NYSE) Scottrade AGL 37.27 (1.11%)Vol. 181,647 16:03 ET

AGL Resources principal business is the distribution of natural gas to customers in central, northwest, northeast and southeast Georgia and the Chattanooga, Tennessee area through its natural gas distribution subsidiary. AGL's major service area is the ten county metropolitan Atlanta area.

#### **General Information**

AGL RESOURCES Ten Peachtree Place NE

Atlanta, GA 30309 Phone: 404 584-4000 Fax: 404 584-3945

Web: www.aglresources.com Email: scave@aglresources.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

Fiscal Year End

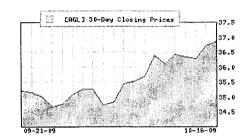
December

Last Reported Quarter Next EPS Date

09/30/09 10/29/2009

#### Price and Volume Information

Zacks Rank	i <b>z</b> .
Yesterday's Close	36.86
52 Week High	37.29
52 Week Low	24.02
Beta	0.41
20 Day Moving Average	254,161.84
Target Price Consensus	36.29



#### % Price Change

4 Week

#### % Price Change Relative to S&P 500 4 Week

3.11

12 Week	8.00	12 Week	-2.77
YTD	17.58	YTD	-2.36
Share Information		Dividend Information	
Shares Outstanding	77.28	Dividend Yield	4.67%
(millions)	, , ,	Annual Dividend	\$1.72
Market Capitalization (millions)	2,848.50	Payout Ratio	0.00
Short Ratio	3.66	Change in Payout Ratio	0.00
Last Split Date	12/04/1995	Last Dividend Payout / Amount	08/12/2009 / \$0.43

#### **EPS Information**

#### Consensus Recommendations

Current Quarter EPS Consensus Estimate	0.22	Current (1=Strong Buy, 5=Strong Sell)	2.20
Current Year EPS Consensus Estimate	2.70	30 Days Ago	2.20
Estimated Long-Term EPS Growth Rate	4.70	60 Days Ago	2.20
Next EPS Report Date	10/29/2009	90 Days Ago	2.20

#### **Fundamental Ratios**

p designatives with the men and the men						
P/E		<b>EPS Growth</b>		Sales Growth		
Current FY Estimate:	13.65	vs. Previous Year	-13.33%	vs. Previous Year	-15.09%	
Trailing 12 Months:	12.05	vs. Previous Quarter	-83.23%	vs. Previous Quarter:	-62.11%	
PEG Ratio	2.93					

|--|

Price Ratios		ROE		ROA
Price/Book	1.62	09/30/09	-	09/30/09
Price/Cash Flow		06/30/09		06/30/09

	7.87		13.60		3.68
Price / Sales	-	03/31/09	13.92	03/31/09	3.66
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	1.03	06/30/09	0.61	06/30/09	8.63
03/31/09	1.06	03/31/09	0.80	03/31/09	8.53
Net Margin		Pre-Tax Margin		Book Value	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	17.12	06/30/09	17.12	06/30/09	22.79
03/31/09	14.84	03/31/09	14.84	03/31/09	22.87
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/09	-	09/30/09	•	09/30/09	-
06/30/09	3.70	06/30/09	0.95	06/30/09	48.78
03/31/09	3.45	03/31/09	0.95	03/31/09	48.72



Zacks.com Quotes and Research

#### ATMOS ENERGY CORP (NYSE)

29.30

(1.38%)

Vol. 447,120

Scottrade

16:00 ET

Atmos Energy Corporation distributes and sells natural gas to residential, commercial, industrial, agricultural and other customers. Atmos operates through five divisions in cities, towns and committee in service areas located in Colorado, Georgia, Illinois, Iowa, Kansas, Kentucky, Louisiana, Missouri, South Carolina, Tennessee, Texas and Virginia. The Company has entered into an agreement to sell all of its natural gas utility operations in South Carolina. The Company also transports natural gas for others through its distribution system.

#### **General Information**

ATMOS ENERGY CP

Three Lincoln Centre 5430 Lbj Freeway

Suite 1800

Dallas, TX 75240 Phone: 972-934-9227 Fax: 972-855-3040

Web: www.atmosenergy.com

Email: InvestorRelations@atmosenergy.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

Fiscal Year End

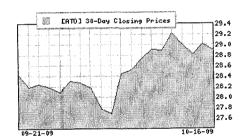
September

Last Reported Quarter Next EPS Date

09/30/09 11/10/2009

#### Price and Volume Information

Zacks Rank	ÚL.
Yesterday's Close	28.90
52 Week High	29.50
52 Week Low	20.07
Beta	0.52
20 Day Moving Average	1,292,367.25
Target Price Consensus	29.2



#### % Price Change

% Price Change	% Price Change Relative to S&P 500		
4 Week 1.3	7 4 Week	-0.44	
12 Week 7.0	8 12 Week	-3.60	
YTD 21.9	4 YTD	1.26	

#### Share Information

Share Information		Dividend Information	
Shares Outstanding	92 27	Dividend Yield	4.57%
(millions)	32.27	Annual Dividend	\$1.32
Market Capitalization	2,666.66	Payout Ratio	0.00
(millions)	2 98	Change in Payout Ratio	0.00
Short Ratio	2.50	Last Dividend Payout / Amount	08/21/2009 / \$0.33
Last Split Date	05/17/1994	Last Dividend Fayout / Amount	VG/2 1/2000 / ψ0.00

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	-0.08	Current (1=Strong Buy, 5=Strong Sell)	2.83
Current Year EPS Consensus Estimate	2.11	30 Days Ago	2.57
Estimated Long-Term EPS Growth Rate	5.00	60 Days Ago	2.57
Next EPS Report Date	11/10/2009	90 Days Ago	2.57

#### **Fundamental Ratios**

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	13.33	vs. Previous Year	14.29%	vs. Previous Year	-52.37%
Trailing 12 Months:	13.63	vs. Previous Quarter	-104.51%	vs. Previous Quarter:	-57.13%
PEG Ratio	2.67				

Price Ratios		ROE		ROA	
Price/Book	1.21	09/30/09	-	09/30/09	-
Price/Cash Flow	6.88	06/30/09	9.14	06/30/09	2.99
Price / Sales	-	03/31/09	9.16	03/31/09	2.93
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	_	09/30/09	-	09/30/09	-
06/30/09	1.24	06/30/09	0.74	06/30/09	3.37 `
03/31/09	1.15	03/31/09	0.90	03/31/09	2.91
Net Margin		Pre-Tax Margin		Book Value	
<b>Net Margin</b> 09/30/09	-	Pre-Tax Margin 09/30/09		Book Value 09/30/09	~
•	5.55	•	- 5.55		23.82
09/30/09		09/30/09		09/30/09	23.82 23.70
09/30/09 06/30/09	5.55	09/30/09 06/30/09	5.55	09/30/09 06/30/09	
09/30/09 06/30/09 03/31/09	5.55	09/30/09 06/30/09 03/31/09	5.55	09/30/09 06/30/09 03/31/09 Debt to Capital	
09/30/09 06/30/09 03/31/09 Inventory Turnover	5.55 4.61	09/30/09 06/30/09 03/31/09 <b>Debt-to-Equity</b>	5.55 4.61	09/30/09 06/30/09 03/31/09 Debt to Capital	



LACLEDE GROUP INC (NYSE)

32.37

(0.37%)

Vol. 98,711

Scottrade 16:02 ET

The Laclede Group, Inc. is a public utility engaged in the retail distribution and transportation of natural gas. The Company, which is subject to the jurisdiction of the Missouri Public Service Commission, serves the City of St. Louis, St. Louis County, the City of St. Charles, St. Charles County, the town of Arnold, and parts of Franklin, Jefferson, St. Charles, St Francois, Ste. Genevieve, Iron, Madison and Butler Counties, all in Missouri.

#### **General Information**

LACLEDE GRP INC 720 Olive Street St. Louis, MO 63101

Phone: 314-342-0500 Fax: 314-421-1979

Web: www.thelacledegroup.com Email: mkullman@lacledegas.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

Fiscal Year End Last Reported Quarter

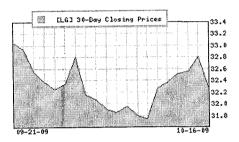
September 09/30/09

Next EPS Date

10/22/2009

#### Price and Volume Information

Zacks Rank	Æ.
Yesterday's Close	32.25
52 Week High	55.81
52 Week Low	29.26
Beta	0.02
20 Day Moving Average	91,660.35
Target Price Consensus	35



% Price Change		% Price Change Relative to S&P 500		
4 Week	-2.89	4 Week	-4.62	
12 Week	-6.82	12 Week	-16.11	
YTD	-31.15	YTD	-42.82	
Share Information		Dividend Information		

#### **Share Information**

Shares Outstanding	22 17	Dividend Yield	4.78%
(millions)	1 <i>1</i>	Annual Dividend	\$1.54
Market Capitalization	714.89	Payout Ratio	0.00
(millions)		Change in Payout Ratio	0.00
Short Ratio	2.07	Local Distribution of Descript / Appoint	09/09/2009 / \$0.38
Last Split Date	03/08/1994	Last Dividend Payout / Amount	09/09/2009 / \$0.50

EPS Information		Consensus necommendations	
Current Quarter EPS Consensus Estimate	-0.18	Current (1=Strong Buy, 5=Strong Sell)	3.25
Current Year EPS Consensus Estimate	2.89	30 Days Ago	3.25
Estimated Long-Term EPS Growth Rate	3.00	60 Days Ago	3.25
Next EPS Report Date	10/22/2009	90 Days Ago	3.25

#### **Fundamental Ratios**

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	12.90	vs. Previous Year	-26.19%	vs. Previous Year	-38.68%
Trailing 12 Months:	10.79	vs. Previous Quarter	-77.86%	vs. Previous Quarter:	-52.97%

4.30 PEG Ratio

ROE ROA **Price Ratios** - 09/30/09 Price/Book 1.35 09/30/09

Price/Cash Flow Price / Sales	7.50	06/30/09 03/31/09	12.78 13.53	06/30/09 03/31/09	3.71 3.89
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	1.24	06/30/09	0.98	06/30/09	3.14
03/31/09	1.17	03/31/09	0.99	03/31/09	2.97
Net Margin		Pre-Tax Margin		Book Value	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	4.81	06/30/09	4.81	06/30/09	23.97
03/31/09	4.46	03/31/09	4.46	03/31/09	24.11
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/09	-	09/30/09	-	09/30/09	***
06/30/09	10.99	06/30/09	0.73	06/30/09	42.30
03/31/09	11.65	03/31/09	0.73	03/31/09	42.17



Vol. 122,499

NEW JERSEY RES (NYSE)

36.84

(1.13%)

Scottrade

16:01 ET

NJ RESOURCES is an exempt energy svcs holding company providing retail & wholesale natural gas & related energy services to customers from the Gulf Coast to New England. Subsidiaries include: (1) N J Natural Gas Co, a natural gas distribution company that provides regulated energy & appliance services to residential, commercial & industrial customers in central & northern N J. (2) NJR Energy Holdings Corp formerly NJR Energy Svcs Corp & (3) NJR Development Corp, a sub-holding company of NJR, which includes the Company's remaining unregulated operating subsidiaries.

#### **General Information**

NJ RESOURCES 1415 Wyckoff Road Wall, NJ 07719 Phone: 732-938-1489 Fax: 732 938-3154

Web: www.njresources.com Email: investcont@njresources.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

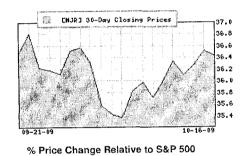
Fiscal Year End Last Reported Quarter

Next EPS Date

September 09/30/09 11/05/2009

#### Price and Volume Information

Zacks Rank	Æ
Yesterday's Close	36.43
52 Week High	42.37
52 Week Low	29.95
Beta	0.13
20 Day Moving Average	200,753.91
Target Price Consensus	42



% Price	Change
---------	--------

Share Information		Dividend Information	
YTD	-7,42	YTD	-23.12
12 Week	-8.19	12 Week	-17.34
4 Week	-1.09	4 Week	-2.85

#### Share Information

Shares Outstanding	42.01	Dividend Yield	3.40%
(millions)	42.01	Annual Dividend	\$1.24
Market Capitalization	1,530.61	Payout Ratio	0.00
(millions)	2.00	Change in Payout Ratio	0.00
Short Ratio	0.00	Least Dividend Devout / Amount	09/11/2009 / \$0.31
Last Split Date	03/04/2008	Last Dividend Fayout / Amount	03/11/2003/140/01

**EPS Information** 

#### Consensus Recommendations

-0.12	Current (1=Strong Buy, 5=Strong Sell)	1.50
2.39	30 Days Ago	1.50
6.50	60 Days Ago	1.67
11/05/2009	90 Days Ago	1.67
	2.39 6.50	-0.12 Current (1=Strong Buy, 5=Strong Sell) 2.39 30 Days Ago 6.50 60 Days Ago 11/05/2009 90 Days Ago

#### **Fundamental Ratios**

P/E	EPS Growth	Sales Growth	
Current FY Estimate:	14.21 vs. Previous Year	130.00% vs. Previous Year	-55.91%
Trailing 12 Months:	17.35 vs. Previous Quarte	r -98.24% vs. Previous Quarter:	-52.96%
PEG Ratio	2.19		

Price Ratios		ROE		ROA	
Price/Book	2.13	09/30/09	-	09/30/09	-
Price/Cash Flow	11.50	06/30/09	12.20	06/30/09	3.58
Price / Sales	-	03/31/09	11.73	03/31/09	3.25
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	1.23	06/30/09	0.88	06/30/09	2.98
03/31/09	1.17	03/31/09	1.07	03/31/09	2.37
Net Margin		Pre-Tax Margin		Book Value	
<b>Net Margin</b> 09/30/09.	-	Pre-Tax Margin 09/30/09		Book Value 09/30/09	-
ŭ	5.66	•	- 5.66		- 17.11
09/30/09.		09/30/09	5.66	09/30/09	17.11 17.90
09/30/09 06/30/09	5.66	09/30/09 06/30/09	5.66	09/30/09 06/30/09	
09/30/09. 06/30/09 03/31/09	5.66	09/30/09 06/30/09 03/31/09	5.66	09/30/09 06/30/09 03/31/09	
09/30/09 06/30/09 03/31/09 Inventory Turnover	5.66 5.26	09/30/09 06/30/09 03/31/09 <b>Debt-to-Equity</b>	5.66 5.26	09/30/09 06/30/09 03/31/09 Debt to Capital	



NICOR I	NC (NYSE)				Scottrade
GAS	38.91	÷ 0.58	(1.51%)	Vol. 245,400	16:01 ET

Nicor Inc. is a holding company and is a member of the Standard & Poor's 500 Index. Its primary business is Nicor Gas, one of the nation's largest natural gas distribution companies. Nicor owns Tropical Shipping, a containerized shipping business serving the Caribbean region and the Bahamas. In addition, the company owns and has an equity interest in several energy-related businesses.

#### **General Information**

NICOR INC 1844 Ferry Road

Naperville, IL 60563-9600 Phone: 630-305-9500 Fax: 630-983-9328 Web: www.nicor.com

Industry

Email: None

**UTIL-GAS DISTR** 

Sector:

Utilities

Fiscal Year End

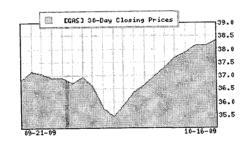
December 09/30/09

Last Reported Quarter Next EPS Date

11/09/2009

#### Price and Volume Information

Zacks Rank	i.
Yesterday's Close	38.33
52 Week High	47.60
52 Week Low	27.50
Beta	0.34
20 Day Moving Average	305,082.34
Target Price Consensus	38.75



#### % Price Change

4 Week 12 Week

	% Price Change Relative to S&P 500	
3.29	4 Week	1.45
4.13	12 Week	-6.25
10.33	YTD	-8.37

Share Information		Dividend Information	
Shares Outstanding	45.22	Dividend Yield	4.85%
(millions)	45.22	Annual Dividend	\$1.86
Market Capitalization	1,733.36	Payout Ratio	0.00
(millions)		Change in Payout Ratio	0.00
Short Ratio		Leat Dividend Boyout / Amount	09/28/2009 / \$0.47
Last Split Date	04/27/1993	Last Dividend Payout / Amount	03/20/2000 / <b>4</b> 0.17

#### Consensus Recommendations

Ero iniormation			
Current Quarter EPS Consensus Estimate	0.09	Current (1=Strong Buy, 5=Strong Sell)	2.67
Current Year EPS Consensus Estimate		30 Days Ago	2.67
Estimated Long-Term EPS Growth Rate	4.20	60 Days Ago	3.00
Next EPS Report Date	11/09/2009	90 Days Ago	3.00

#### **Fundamental Ratios**

P/E	EPS G	rowth		Sales Growth	
Current FY Estimate:	14.90 vs. Prev	vious Year	-21.87%	vs. Previous Year	-36.04%
Trailing 12 Months:	15.09 vs. Prev	vious Quarter	-47.92%	vs. Previous Quarter:	-59.70%
PEG Ratio	3.52				

ROA ROE **Price Ratios** 

1.72 09/30/09 Price/Book

- 09/30/09

Price/Cash Flow	5.60	06/30/09	11.78	06/30/09	2.59
Price / Sales	-	03/31/09	12.46	03/31/09	2.67
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	_	09/30/09	-	09/30/09	-
06/30/09	0.76	06/30/09	0.73	06/30/09	3.81
03/31/09	0.78	03/31/09	0.77	03/31/09	3.70
Net Margin		Pre-Tax Margin		Book Value	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	5.46	06/30/09	5.46	06/30/09	22.25
03/31/09	5.21	03/31/09	5.21	03/31/09	22.16
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/09	-	09/30/09	_	09/30/09	-
06/30/09	14.05	06/30/09	0.50	06/30/09	33.12
03/31/09	15.05	03/31/09	0.45	03/31/09	30.91



NORTHWEST NAT GAS CO (NYSE)

44.4

de.

(2.49%)

Vol. 111,785

Scottrade

NW Natural is principally engaged in the distribution of natural gas. The Oregon Public Utility Commission (OPUC) has allocated to NW Natural as its exclusive service area a major portion of western Oregon, including the Portland metropolitan area, most of the fertile Willamette Valley and the coastal area from Astoria to Coos Bay. NW Natural also holds certificates from the Washington Utilities and Transportation Commission (WUTC) granting it exclusive rights to serve portions of three Washington counties bordering the Columbia River.

**General Information** 

NORTHWEST NAT G

220 NW Second Avenue Portland, OR 97209

Phone: 503 226-4211 Fax: 503 273-4824 Web: www.nwnatural.com Email: Bob.Hess@nwnatural.com

Industry

**UTIL-GAS DISTR** 

Sector: Utilities

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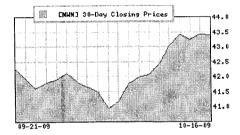
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Fiscal Year End Last Reported Quarter December 09/30/09

Last Reported Quart Next EPS Date 11/03/2009

#### Price and Volume Information

Zacks Rank	ÚR.
Yesterday's Close	43.39
52 Week High	52.39
52 Week Low	37.71
Beta	0.25
20 Day Moving Average	123,685.30
Target Price Consensus	51.25



% Price Change

% Price Change Relative to S&P 500

4 Week	
12 Week	
YTD	

 1.90
 4 Week
 0.09

 -4.24
 12 Week
 -13.78

 -1.90
 YTD
 -18.53

Share Information Shares Outstanding 26.51 Dividend Yield

(millions)
Market Capitalization
(millions)
Short Ratio

Annual Dividend \$1.58

1,150.40 Payout Ratio 0.00

14 44 Change in Payout Ratio 0.00

Last Split Date

09/09/1996 Last Dividend Payout / Amount 07/29/2009 / \$0.40

**EPS Information** 

#### Consensus Recommendations

Current Quarter EPS Consensus Estimate	-0.36	Current (1=Strong Buy, 5=Strong Sell)	1.50
Current Year EPS Consensus Estimate	2.70	30 Days Ago	1.50
Estimated Long-Term EPS Growth Rate	6.00	60 Days Ago	1.50
Next EPS Report Date	11/03/2009	90 Days Ago	1.50

**Fundamental Ratios** 

EPS Growth

Sales Growth

Current FY Estimate:

16.06 vs. Previous Year

0.00% vs. Previous Year -93.30% vs. Previous Quarter:

-22.06% -65.92%

3.64%

Trailing 12 Months: PEG Ratio 15.61 vs. Previous Quarter 2.68

ROE

ROA

Price Ratios

Price/Book	1.75	09/30/09	-	09/30/09	-
Price/Cash Flow	8.10	06/30/09	11.51	06/30/09	3.26
Price / Sales	-	03/31/09	11.69	03/31/09	3.37
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	0.94	06/30/09	0.67	06/30/09	7.03
03/31/09	1.03	03/31/09	0.80	03/31/09	6.78
Net Margin		Pre-Tax Margin		Book Value	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	11.19	06/30/09	11.19	06/30/09	24.80
03/31/09	10.81	03/31/09	10.81	03/31/09	25.05
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/09	-	09/30/09		09/30/09	-
06/30/09	8.96	06/30/09	0.89	06/30/09	47.18
03/31/09	10.10	03/31/09	0.88	03/31/09	46.93
00/01/00	10.70	00/01/00	0.00	00/01/00	40.00



PIEDMONT NAT GAS INC (NYSE)

24.62 **≈0.43**  (1.78%)Vol. 318.583 Scottrade 16:02 ET

Piedmont Natural Gas Co, Inc., is an energy and services company engaged in the transportation and sale of natural gas and the sale of propane to residential, commercial and industrial customers in North Carolina, South Carolina and Tennessee. The Company is the second-largest natural gas utility in the southeast. The Company and its nonutility subsidiaries and divisions are also engaged in acquiring, marketing and arranging for the transportation and storage of natural gas for large-volume purchasers, and in the sale of propane to customers in the Company's threestate service area.

#### **General Information**

PIEDMONT NAT GA

4720 Piedmont Row Drive Charlotte, NC 28210 Phone: 704 364-3120 Fax: 704-365-3849 Web: www.piedmontng.com

Email: investorrelations@piedmontng.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

Fiscal Year End

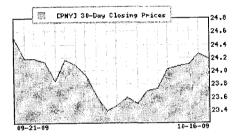
October

Last Reported Quarter Next EPS Date

07/31/09 01/04/2010

#### Price and Volume Information

Zacks Rank	iu
Yesterday's Close	24.19
52 Week High	34.19
52 Week Low	20.68
Beta	0.18
20 Day Moving Average	370,152.69
Target Price Consensus	27.42



#### % Price Change Relative to S&P 500

% Price Change		% Price Change Relative to S&P 500	
4 Week	-1.06	4 Week	-2.83
12 Week	-3.20	12 Week	-12.85
YTD	-23.62	YTD	-36.57

Share Information		Dividend Information		
Shares Outstanding	73.11	Dividend Yield	4.46%	
(millions)	73.11	Annual Dividend	\$1.08	
Market Capitalization	1,768.56	Payout Ratio	0.00	
(millions)		Change in Payout Ratio	0.00	
Short Ratio	7.66	Change in Flagger Hair	09/22/2009 / \$0.27	
Last Split Date	11/01/2004	Last Dividend Payout / Amount	03/22/2003 / \$0.2/	

#### Conconcue Pacommendations

EPS Information	Consensus recommendations		
Current Quarter EPS Consensus Estimate	-0.14	Current (1=Strong Buy, 5=Strong Sell)	2.20
Current Year EPS Consensus Estimate		30 Days Ago	2.20
Estimated Long-Term EPS Growth Rate	7.00	60 Days Ago	2.33
Next EPS Report Date	01/04/2010	90 Days Ago	2.00

#### **Fundamental Ratios**

P/E	EPS Growth	Sales Growth
Current FY Estimate:	15.35 vs. Previous Year	0.00% vs. Previous Year -49.20%
Trailing 12 Months:	- vs. Previous Quarter	-113.70% vs. Previous Quarter: -60.43%

PEG Ratio

2.19

Price Ratios		ROE		ROA	
Price/Book	1.86	07/31/09	12.13	07/31/09	3.64
Price/Cash Flow	8.55	04/30/09	12.17	04/30/09	3.66
Price / Sales	1.02	01/31/09	11.70	01/31/09	3.55
Current Ratio		Quick Ratio		Operating Margin	
07/31/09	0.99	07/31/09	0.76	07/31/09	6.59
04/30/09	1.07	04/30/09	0.88	04/30/09	5.97
01/31/09	0.99	01/31/09	0.76	01/31/09	5.22
Net Margin		Pre-Tax Margin		Book Value	
<b>Net Margin</b> 07/31/09	12.89		12.89	<b>Book Value</b> 07/31/09	12.99
· ·	12.89 11.58	07/31/09	12.89 11.58	07/31/09	12.99 13.20
07/31/09		07/31/09 04/30/09		07/31/09	
07/31/09 04/30/09	11.58	07/31/09 04/30/09	11.58	07/31/09 04/30/09	13.20
07/31/09 04/30/09 01/31/09	11.58	07/31/09 04/30/09 01/31/09 <b>Debt-to-Equity</b>	11.58	07/31/09 04/30/09 01/31/09 Debt to Capital	13.20
07/31/09 04/30/09 01/31/09 Inventory Turnover	11.58 8.66	07/31/09 04/30/09 01/31/09 <b>Debt-to-Equity</b> 07/31/09	11.58 8.66	07/31/09 04/30/09 01/31/09 Debt to Capital 07/31/09	13.20 12.98



SOUTH JERSEY INDS INC (NYSE)

37.42

(1.38%)

Vol. 190,790

Scottrade

16:03 ET

South Jersey Inds Inc. is engaged in the business of operating, through subsidiaries, various business enterprises. The company's most significant subsidiary is South Jersey Gas Company (SJG). SJG is a public utility company engaged in the purchase, transmission and sale of natural gas for residential, commercial and industrial use. SJG also makes off-system sales of natural gas on a wholesale basis to various customers on the interstate pipeline system and transports natural gas.

#### **General Information**

SOUTH JERSEY IN

1 South Jersey Plaza Folsom, NJ 08037 Phone: 609 561-9000

Fax: 609 561-8225

Web: www.sjindustries.com

Email: investorrelations@sjindustries.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

Fiscal Year End

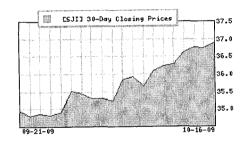
December 09/30/09

Last Reported Quarter Next EPS Date

11/05/2009

#### Price and Volume Information

Zacks Rank	in.
Yesterday's Close	36.91
52 Week High	40.78
52 Week Low	29.27
Beta	0.22
20 Day Moving Average	173,099.16
Target Price Consensus	45.2



%	Price	Change

% Price Change		% Price Change Relative to S&P 500	
4 Week	5.16	4 Week	3.28
12 Week	-0.03	12 Week	-9.99
YTD	-7.38	YTD	-23.08

Share Information		Dividend information	
Shares Outstanding	29.80	Dividend Yield	3.22%
(millions)	23.00	Annual Dividend	\$1.19
Market Capitalization	1,099.77	Payout Ratio	0.00
(millions)		Change in Payout Ratio	0.00
Short Ratio	4.85	Last Bridged Devot / Amount	09/08/2009 / \$0.30
Last Split Date	07/01/2005	Last Dividend Payout / Amount	09/06/2009 / ψ0:30

Last Split Date

#### incensus Recommendations

EPS Information		COMPENSATION MECONIMIEMPRICATIONS	
Current Quarter EPS Consensus Estimate	0.06	Current (1=Strong Buy, 5=Strong Sell)	1.60
Current Year EPS Consensus Estimate		30 Days Ago	1.60
Estimated Long-Term EPS Growth Rate	9.60	60 Days Ago	1.75
Next EPS Report Date	11/05/2009	90 Days Ago	2.40

#### **Fundamental Ratios**

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	15.36	vs. Previous Year	-42.31%	vs. Previous Year	-1.00%
Trailing 12 Months:	15.91	vs. Previous Quarter	-89.73%	vs. Previous Quarter:	-62.87%

PEG Ratio

1.60

ROA

Price/Book	2.04	09/30/09	-	09/30/09	-
Price/Cash Flow	10.62	06/30/09	13.17	06/30/09	4.06
Price / Sales	-	03/31/09	14.14	03/31/09	4.30
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	-	09/30/09	-	09/30/09	•
06/30/09	0.92	06/30/09	0.64	06/30/09	7.13
03/31/09	0.93	03/31/09	0.74	03/31/09	7.43
Net Margin		Pre-Tax Margin		Book Value	
09/30/09	-	09/30/09		09/30/09	-
06/30/09	17.54	06/30/09	17.54	06/30/09	18.11
03/31/09	14.51	03/31/09	14.51	03/31/09	18.20
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/09	-	09/30/09	-	09/30/09	•
06/30/09	5.74	06/30/09	0.62	06/30/09	38.14
03/31/09	5.73	03/31/09	0.61	03/31/09	38.07



SOUTH	WEST GAS C	ORP (NYSE)			Scottrade
swx	25.41	<i>≈</i> 0.05	(0.20%)	Vol. 255,762	16:01 ET

SOUTHWEST GAS CORP. is principally engaged in the business of purchasing, transporting, and distributing natural gas in portions of Arizona, Nevada, and California. The Company also engaged in financial services activities, through PriMerit Bank, Federal Savings Bank (PriMerit or the Bank), a wholly owned subsidiary.

#### **General Information**

SOUTHWEST GAS 5241 Spring Mountain Road P.O. Box 98510 Las Vegas, NV 89193-8510 Phone: 702 876-7237 Fax: 702-876-7037 Web: www.swgas.com Email: None

Industry

UTIL-GAS DISTR

Sector:

Utilities

Fiscal Year End

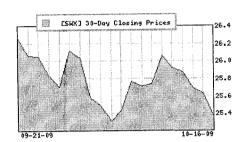
December 09/30/09

Last Reported Quarter Next EPS Date

11/04/2009

#### Price and Volume Information

Zacks Rank	Ž.
Yesterday's Close	25.36
52 Week High	26.84
52 Week Low	17.08
Beta	0.70
20 Day Moving Average	175,584.09
Target Price Consensus	28.25



#### % Price Change

% Price Change		% Price Change Relative to S&P !	500
4 Week	-3.65	4 Week	-5.36
12 Week	6.33	12 Week	-4.27
YTD	0.56	YTD	-16.50
Share Information		Dividend Information	

#### **Share Information**

Shares Outstanding	44.82	Dividend Yield	3.75%
(millions)	77.02	Annual Dividend	\$0.95
Market Capitalization	1,136.69	Payout Ratio	0.00
(millions)		Change in Payout Ratio	0.00
Short Ratio	5.56	to the Driver Amount	08/13/2009 / \$0.24
Last Split Date	N/A	Last Dividend Payout / Amount	00/13/2009/ \$0.24

#### Consensus Recommendations

EPS Information		Consensus meconimientations	
Current Quarter EPS Consensus Estimate	-0.36	Current (1=Strong Buy, 5=Strong Sell)	2.60
Current Year EPS Consensus Estimate	1.84	30 Days Ago	2.60
Estimated Long-Term EPS Growth Rate	7.00	60 Days Ago	2.60
Next EPS Report Date	11/04/2009	90 Days Ago	2.60

#### **Fundamental Ratios**

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	13.78	vs. Previous Year	116.67%	vs. Previous Year	-13.34%
Trailing 12 Months:	17.37	vs. Previous Quarter	-99.11%	vs. Previous Quarter:	-43.81%
PEG Ratio	1.97				

#### Price Ratios

1.05 09/30/09 Price/Book

ROA

- 09/30/09

ROE

Price/Cash Flow	4.30	06/30/09	5.70	06/30/09	1.63
Price / Sales	_	03/31/09	5.45	03/31/09	1.56
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	0.69	06/30/09	0.69	06/30/09	3.07
03/31/09	0.82	03/31/09	0.82	03/31/09	2.81
Net Margin		Pre-Tax Margin		Book Value	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	5.35	06/30/09	5.35	06/30/09	24.16
03/31/09	5.09	03/31/09	5.09	03/31/09	24.40
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/09	~	09/30/09	-	09/30/09	-
06/30/09	~	06/30/09	1.04	06/30/09	50.97
03/31/09	-	03/31/09	1.05	03/31/09	51.33



WGL HLDGS INC (NYSE) Scottrade **~ 0.45** (1.33%)16:00 ET

WASHINGTON GAS LIGHT CO is a public utility that delivers and sells natural gas to metropolitan Washington, D.C. and adjoining areas in Maryland and Virginia. A distribution subsidiary serves portions of Virginia and West Virginia. The Company has four wholly-owned active subsidiaries that include: Shenandoah Gas Company (Shenandoah) is engaged in the delivery and sale of natural gas at retail in the Shenandoah Valley, including Winchester, Middletown, Strasburg, Stephens City and New Market, Virginia, and Martinsburg, West Virginia.

#### **General Information**

WGL HLDGS INC 101 Constitution Avenue NW Washington, DC 20080 Phone: 703 750-2000 Fax: 703 750-4828

Web: www.wglholdings.com Email: madams@washgas.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

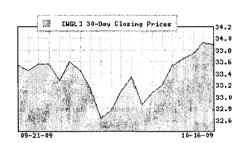
Fiscal Year End Last Reported Quarter

Next EPS Date

September 09/30/09 11/05/2009

#### Price and Volume Information

Zacks Rank	ž <b>i</b>
Yesterday's Close	33.90
52 Week High	37.08
52 Week Low	25.34
Beta	0.21
20 Day Moving Average	247,161.59
Target Price Consensus	35.5



#### % Price Change

% Price Change		% Price Change Relative to S&	P 500
4 Week	-0.21	4 Week	-1.98
12 Week	1.62	12 Week	-8.51
YTD	3.70	YTD	-13.88

Share Information		Dividend Information	
Shares Outstanding	50.14	Dividend Yield	4.34%
(millions)		Annual Dividend	\$1.47
Market Capitalization (millions)	-	Payout Ratio	0.00
Short Ratio	12.58	Change in Payout Ratio	0.00
Last Split Date			10/07/2009 / \$0.37

#### **EPS Information**

#### Consensus Recommendations

Current Quarter EPS Consensus Estimate	-0.31	Current (1=Strong Buy, 5=Strong Sell)	2.50
Current Year EPS Consensus Estimate	2.45	30 Days Ago	2.50
Estimated Long-Term EPS Growth Rate	5.00	60 Days Ago	2.50
Next EPS Report Date	11/05/2009	90 Days Ago	2.50

Fundamental Ratios					
P/E		EPS Growth		Sales Growth	
Current FY Estimate:	13.89	vs. Previous Year	83.33%	vs. Previous Year	-8.09%
Trailing 12 Months:	13.19	vs. Previous Quarter	-93.33%	vs. Previous Quarter:	-58.97%
PEG Ratio	2.78				
Price Ratios		ROE		ROA	

Price/Book	1.50	09/30/09	-	09/30/09	-
Price/Cash Flow	7.87	06/30/09	11.67	06/30/09	3.84
Price / Sales	-	03/31/09	11.60	03/31/09	3.75
Current Ratio		Quick Ratio		Operating Margin	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	1.17	06/30/09	0.82	06/30/09	5.26
03/31/09	1.20	03/31/09	1.04	03/31/09	5.08
Net Margin		Pre-Tax Margin		Book Value	
09/30/09	-	09/30/09	-	09/30/09	-
06/30/09	7.81	06/30/09	7.81	06/30/09	22.56
03/31/09	7.58	03/31/09	7.58	03/31/09	22.89
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/09	-	09/30/09	-	09/30/09	**
06/30/09	9.10	06/30/09	0.55	06/30/09	34.99
03/31/09	8.22	03/31/09	0.57	03/31/09	35.81



	Recent (10/14/09)	3 Months Ago (7/15/09)	Year Ago (10/15/08)		Recent (10/14/09)	3 Months Ago (7/15/09)	Ago
TAXABLE							
Market Rates				Mortgage-Backed Securities			
Discount Rate	0.50	0.50	1.75	GNMA 6.5%	3.65	3.41	6.06
Federal Funds	0.00-0.25	0.00-0.25	1.50	FHLMC 6.5% (Gold)	2.47	2.75	5.96
Prime Rate	3.25	3.25	4.50	FNMA 6.5%	2.21	2.59	5.91
30-day CP (A1/P1)	0.16	0.33	4.47	fnma arm	2.56	2.98	3.87
3-month LIBOR	0.28	0.51	4.55	Corporate Bonds			
Bank CDs				Financial (10-year) A	5.45	6.62	8.19
6-month	0.39	0.58	1.73	Industrial (25/30-year) A	5.48	6.12	7.03
1-year	0.63	0.85	2.27	Utility (25/30-year) A	5.65	5.97	6.67
5-year	2.24	1.92	3.48	Utility (25/30-year) Baa/BBB	6.22	7.19	7.03
U.S. Treasury Securities	5			Foreign Bonds (10-Year)			
3-month	0.07	0.18	0.21	Canada	3.53	3.49	3.76
6-month	0.15	0.27	88.0	Germany	3.23	3.37	4.12
1-year	0.32	0.47	1.07	Japan	1.31	1.34	1.59
5-year	2.33	2.51	2.82	United Kingdom	3.50	3.80	4.71
10-year	3.41	3.60	3.95	Preferred Stocks			
10-year (inflation-prote	cted) 1.46	1.85	3.07	Utility A	5.96	5.95	6.57
30-year	4.26	4.49	4.19	Financial A	7.00	7.67	7.33
30-year Zero	4.39	4.60	4.04	Financial Adjustable A	5.49	5.49	5.49
Two a grown Co an	witer Viold	Curro		TAX-EXEMPT			
Treasury Secu	rity rielu	Curve		Bond Buyer Indexes			
6.00%				20-Bond Index (GOs)	4.06	4.71	5.47
	ļ			25-Bond Index (Revs)	4.69	5.70	5.97
5.00%				General Obligation Bonds (G	Os)		
5.00% -				1-year Aaa	0.37	0.40	2.15
				1-year A	0.80	1.10	2.25
4.00%				5-year Aaa	1.90	2.07	3.70
				5-year A	2,10	3.47	3.75
3.00% -				10-year Aaa	3.05	2.98	4.86
				10-year A	3.45	4.50	5.06
2.00%				25/30-year Aaa	4.10	4.59	5.99
				25/30-year A	4.65	6.10	6.37
1.00%				Revenue Bonds (Revs) (25/30-)		00	0.07
		-	rrent	Education AA	4.90	5.95	6.17
		Ve	ar-Ago				
		10		FIECING AA	4 95	h.UU	h. 1 /
	10	10	30	Electric AA Housing AA	4.95 5.40	6.00 6.40	
0.00%	10	10		Housing AA  Hospital AA	4.95 5.40 5.60	6.40 6.35	6.12 6.60 6.65

# Federal Reserve Data

(Two-			ot Seasonally Adjusted			
		Recent Levels		Averag	e Levels Ove	r the Last
	10/7/09	9/23/09	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	918434	854614	63820	796002	800839	706471
Borrowed Reserves	288565	307300	-18735	331341	421671	519593
Net Free/Borrowed Reserves	629869	547314	82555	464661	379168	186878
	N	MONEY SUPE	PLY			
(Or	ne-Week Period	l: in Billions.	Seasonally Adjusted)			
	,0 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Recent Level		Growt	h Rates Over	the Last
	9/28/09	9/21/09	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1653.6	1639.8	13.8	0.2%	13.0%	10.9%
M2 (M1+savings+small time deposits)	8357.3	8309.8	47.5	0.4%	0.7%	5.5%

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		Recent (10/07/09)	3 Months Ago (7/08/09)	Year Ago (10/08/08)		Recent (10/07/09)	3 Months Ago (7/08/09)	Year Ago (10/08/08
TAXABLE			*******			***************************************		
Mar	ket Rates				Mortgage-Backed Securities			
Disc	ount Rate	0.50	0.50	1.75	GNMA 6.5%	3.44	3.71	5.82
Fed€	eral Funds	0.00-0.25	0.00-0.25	1.50	FHLMC 6.5% (Gold)	2.38	2.99	5.70
Prim	ie Rate	3.25	3.25	4.50	FNMA 6.5%	2.33	2.83	5.62
30-c	lay CP (A1/P1)	0.16	0.36	4.55	FNMA ARM	2.56	2.98	3.84
3-m	onth LIBOR	0.28	0.53	4.52	Corporate Bonds			
Ban!	k CDs				Financial (10-year) A	5.46	6.53	7.34
6-m	onth	0.40	0.65	1.73	Industrial (25/30-year) A	5.28	5.82	6.66
1-ye	ar	0.64	0.86	2.27	Utility (25/30-year) A	5.44	5.71	6.58
5-ye		2.24	1.94	3.48	Utility (25/30-year) Baa/BBB	5.95	6.85	6.93
	Treasury Securitie	s			Foreign Bonds (10-Year)	0.00		
3-me	•	0.06	0.18	0.61	Canada	3.29	3.28	3.59
6-m	onth	0.14	0.25	1.05	Germany	3.12	3.28	3.80
1-ye	ar	0.32	0.44	1.26	Japan	1.27	1.30	1.39
5-ye		2.17	2.23	2.63	United Kingdom	3.39	3.62	4.30
10-v		3.18	3.31	3.64	Preferred Stocks	3.33	5702	
,	ear (inflation-prote		1.76	2.66	Utility A	6.29	7.59	6.99
30-y	•	4.00	4.19	4.05	Financial A	6.89	6.57	8.54
,	ear Zero	4.10	4.31	3.97	Financial Adjustable A	5.48	5.48	5.48
		•4 \$7• 11			AX-EXEMPT			
i	reasury Secu	irity Yield	Curve	-	Bond Buyer Indexes			
5.00%					20-Bond Index (GOs)	3.94	4.83	5.36
3.00 /8					25-Bond Index (Revs)	4.69	5.75	5.69
					General Obligation Bonds (G		3.73	5.05
5.00% -					1-year Aaa	0.37	0.43	2.18
					1-year A	0.87	0.93	2.25
1.00% -					5-year Aaa	1.57	1.96	3.34
					5-year A	2.77	2.40	3.44
3.00%					10-year Aaa	2.57	3.09	4,31
					10-year A	3.77	3.45	4.51
2.00%					25/30-year Aaa	3.77	3.43 4.59	5.35
					25/30-year A	5.01	4.39 5.05	5.33 5.70
1.00%	Y X				Revenue Bonds (Revs) (25/30-Y		5.05	5./0
			i	rrent	Education AA	•	c cc	E 00
, aas, LL	<del>/</del>		Ye:	ar-Ago	Electric AA	4.85	5.55	5.80
0.00% 3 6	1 2 3 5	10		30		4.90	5.65	5.90
	Years				Housing AA Hospital AA	5.20	5.80	6.00 6.10
Mos.	X CHILD					5.20	5.90	

### Federal Reserve Data

	В	ANK RESERV	/ES			
(Two	-Week Period; ir	n Millions, No	ot Seasonally Adjus	sted)		
	•	Recent Levels			e Levels Ove	r the Last
	9/9/09	8/26/09	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	823187	794531	28656	754073	773681	643433
Borrowed Reserves	320295	327647	-7352	369408	467326	513721
Net Free/Borrowed Reserves	502892	466884	36008	384665	306355	129711
	٨	MONEY SUPE	PLY			
(0	Dne-Week Period	; in Billions,	Seasonally Adjuste	d) ·		
•		Recent Levels	· ,	Growt	h Rates Over	the Last
	9/21/09	9/14/09	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1639.8	1670.9	-31.1	-6.8%	11.4%	11.3%
M2 (M1+savings+small time deposits)	8310.3	8318.3	-8.0	-3.5%	-1.1%	5.2%

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	Recent 9/30/09)	3 Months Ago (6/30/09)	Year Ago (10/01/08)		Recent (9/30/09)	3 Months Ago (6/30/09)	Year Ago (10/01/08)
TAXABLE							
Market Rates				Mortgage-Backed Securities			
Discount Rate	0.50	0.50	2.25	GNMA 6.5%	3.63	3.77	5.64
Federal Funds 0	.00-0.25	0.00-0.25	2.00	FHLMC 6.5% (Gold)	2.82	3.23	5.63
Prime Rate	3.25	3.25	5.00	FNMA 6.5%	2.60	3.07	5.54
30-day CP (A1/P1)	0.18	0.41	3.05	fnma arm	2.62	2.53	3.88
3-month LIBOR	0.29	0.60	4.15	Corporate Bonds			
Bank CDs				Financial (10-year) A	5.61	6.87	7.25
6-month	0.40	0.65	1.61	Industrial (25/30-year) A	5.31	5.96	6.52
1-year	0.64	0.86	2.14	Utility (25/30-year) A	5.40	5.79	6.46
5-year	2.27	1.92	3.77	Utility (25/30-year) Baa/BBB	5.73	6.88	6.61
U.S. Treasury Securities				Foreign Bonds (10-Year)			
3-month	0.11	0.18	0.80	Canada	3.31	3.36	3.71
6-month	0.17	0.34	1.45	Germany	3.22	3.39	4.00
1-year	0.38	0.48	1.66	Japan	1.30	1.36	1.51
5-year	2.31	2.56	2.86	United Kingdom	3.59	3.69	4.43
10-year	3.31	3.53	3.74	Preferred Stocks			
10-year (inflation-protected)	1.53	1.80	2.25	Utility A	5 <i>.77</i>	6.10	6.53
30-year	4.05	4.33	4.22	Financial A	6.61	7.75	7.78
30-year Zero	4.13	4.41	4.22	Financial Adjustable A	5.48	5.48	5.48
Tuesday Cooper	v Viold	Curvo		TAX-EXEMPT			
Treasury Securit	y i lelu	Curve	1	Bond Buyer Indexes			
6.00%	,			20-Bond Index (GOs)	4.04	4.79	5.23
				25-Bond Index (Revs)	4.86	5 <i>.77</i>	5.56
5.00%				General Obligation Bonds (C	iOs)		
5.00 % 7				1-year Aaa	0.37	0.40	2.10
				1-year A	0.80	1.10	2.20
4.00%				5-year Aaa	1.57	2.07	3.32
				5-year A	2.00	3.47	3.37
3.00%				10-year Aaa	2.57	3.23	4.23
				10-year A	2.95	4.75	4.43
2.00%				25/30-year Aaa	3.92	4.66	5.29
			ļļ	25/30-year A	4.45	6.18	5.67
1.00%			rrent	Revenue Bonds (Revs) (25/30-	Year)		
$r \mid \mathcal{V} \mid 1$				Education AA	4.70	6.05	5.45
0.00%		— Ye	ar-Ago	Electric AA	4.75	6.10	5.40
3 6 1 2 3 5 1	0		30	Housing AA	5.10	6.50	5.90
Mos. Years			ľ	Hospital AA	5.25	6.45	5.95

# Federal Reserve Data

Toll Road Aaa

(Tw	o-Week Period; in	ANK RESERV Millions, No Recent Levels	ot Seasonally Adjusted	) Averag	e Levels Ove	r the Last
	9/23/09	9/9/09	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	854633	823202	31431	763053	790331	675003
Borrowed Reserves	307300	3 <b>2</b> 0295	-12995	347846	444263	518826
Net Free/Borrowed Reserves	547333	502907	44426	415208	346068	156178
	N	IONEY SUPI	PLY			
(1	One-Week Period,	: in Billions,	Seasonally Adjusted)			
•		Recent Level		Growt	h Rates Over	the Last
	9/14/09	9/7/09	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1668.5	1666.8	1.7	3.0%	13.4%	16.7%
M2 (M1+savings+small time deposits)	8303.3	8307.2	-3.9	-3.9%	-1.4%	7.6%

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5.40

4.75

6.05

		Recent (9/23/09)	3 Months Ago (6/24/09)	Year Ago (9/24/08)		Recent (9/23/09)	3 Months Ago (6/24/09)	Year Ago (9/24/08
TAXABLE								
	Market Rates				Mortgage-Backed Securities			
	Discount Rate	0.50	0.50	2.25	GNMA 6.5%	3.77	3.79	5.56
	Federal Funds	0.00-0.25	0.00-0.25	2.00	FHLMC 6.5% (Gold)	2.57	3.28	5.43
	Prime Rate	3.25	3.25	5.00	FNMA 6.5%	2.36	3.06	5.34
	30-day CP (A1/P1)	0.21	0.44	2.85	FNMA ARM	2.62	2.53	3.86
	3-month LIBOR	0.29	0.60	3.48	Corporate Bonds			
	Bank CDs				Financial (10-year) A	5.68	6.75	7.14
	6-month	0.40	0.65	1.61	Industrial (25/30-year) A	5.47	6.07	6.53
	1-year	0.64	0.87	2.14	Utility (25/30-year) A	5.58	5.89	6.50
	5-year	2.27	1.92	3.77	Utility (25/30-year) Baa/BBB	6.14	7.30	6.74
	U.S. Treasury Securities	6			Foreign Bonds (10-Year)			
	3-month	0.09	0.18	0.46	Canada	3,42	3.45	3.66
	6-month	0.19	0.31	1.43	Germany	3.37	3.42	4.16
	1-year	0.40	0.46	1.89	Japan	1.35	1.39	1.49
	5-year	2.37	2.71	2.91	United Kingdom	3.75	3.70	4.57
	10-year	3.42	3.69	3.81	Preferred Stocks			
	10-year (inflation-prote	cted) 1.60	1.88	1.99	Utility A	6.08	6.05	6.85
	30-year	4.20	4.43	4.41	Financial A	6.55	8.21	8.04
	30-year Zero	4.30	4.50	4.39	Financial Adjustable A	5.47	5.47	5.47
	Two agreemy Coore	nity Viold	Curvo	Т.	AX-EXEMPT			
	Treasury Secu	rny rieiu	Curve	1	Bond Buyer Indexes			
6.00%					20-Bond Index (GOs)	4.20	4.86	5.03
0.0070					25-Bond Index (Revs)	4.98	5.78	5.44
5.00%					General Obligation Bonds (G	Os)		
5.00%					1-year Aaa	0.40	0.40	2.15
					1-year A	0.90	0.90	2.25
4.00% -					5-year Aaa	1.61	2.17	3.10
					5-year A	3.01	2.60	3.20
					10-year Aaa	2.65	3.27	4.02
					,	4.15	3.63	4.22
3.00% -					10-year A	4.15	3.63 4.70	
3.00% -					10-year A 25/30-year Aaa	4.15 4.03	4.70	4.22 5.13 5.45
3.00% - 2.00% -					10-year A	4.15 4.03 5.60		5.13
3.00% - 2.00% -				rrent	10-year A 25/30-year Aaa 25/30-year A <b>Revenue Bonds (Revs) (25/30-)</b>	4.15 4.03 5.60 (ear)	4.70 5.15	5.13 5.45
3.00% - 2.00% - 1.00% -				rrent ar-Ago	10-year A 25/30-year Aaa 25/30-year A <b>Revenue Bonds (Revs) (25/30-Y</b> Education AA	4.15 4.03 5.60 <b>(ear)</b> 5.35	4.70 5.15 5.80	5.13 5.45 5.55
3.00% - 2.00% - 1.00% -	3 6 1 2 3 5	10			10-year A 25/30-year Aaa 25/30-year A <b>Revenue Bonds (Revs) (25/30-Y</b> Education AA Electric AA	4.15 4.03 5.60 (ear) 5.35 5.40	4.70 5.15 5.80 5.90	5.13 5.45 5.55 5.60
3.00% - 2.00% - 1.00% - 0.00% -	3 6 1 2 3 5 Mos. Years	10		ar-Ago	10-year A 25/30-year Aaa 25/30-year A <b>Revenue Bonds (Revs) (25/30-Y</b> Education AA	4.15 4.03 5.60 <b>(ear)</b> 5.35	4.70 5.15 5.80	5.13

# Federal Reserve Data

(7	B wo-Week Period; ir	ANK RESERV Millions, No				
		Recent Levels		Averag	ge Levels Ove	r the Last
	9/9/09	8/26/09	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	823201	794546	28655	754077	773683	643434
Borrowed Reserves	320295	327647	-7352	369408	467326	513721
Net Free/Borrowed Reserves	502906	466899	36007	384669	306357	129712
	N	ONEY SUPP	LY			
	(One-Week Period	; in Billions,	Seasonally Adjust	ed)		
		Recent Levels	,	Grow	th Rates Over	the Last
	9/7/09	8/31/09	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1667.2	1635.6	31.6	9.2%	11.6%	18.0%
M2 (M1+savings+small time deposits)	8306.2	8293.6	12.6	-3.0%	-0.5%	8.0%

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		Recent (9/16/09)	3 Months Ago (6/17/09)	Year Ago (9/17/08)		Recent (9/16/09)	3 Months Ago (6/17/09)	Year Ago (9/17/08
TAXABL	E				the state of the s	****	**************************************	***************************************
	Market Rates				Mortgage-Backed Securities			
	Discount Rate	0.50	0.50	2.25	GNMA 6.5%	3.57	4.00	5.43
	Federal Funds	0.00-0.25	0.00-0.25	2.00	FHLMC 6.5% (Gold)	2.71	3.13	5.33
	Prime Rate	3.25	3.25	5.00	FNMA 6.5%	2.47	2.96	5.24
	30-day CP (A1/P1)	0.21	0.42	2.50	FNMA ARM	2.62	2.53	3.86
	3-month LIBOR	0.29	0.61	3.06	Corporate Bonds			
	Bank CDs				Financial (10-year) A	5.74	6.70	6.79
	6-month	0.40	0.66	1.61	Industrial (25/30-year) A	5.55	6.13	6.08
	1-year	0.65	0.87	2.26	Utility (25/30-year) A	5.59	5.95	5.94
	5-year	2.30	1.92	4.10	Utility (25/30-year) Baa/BBB	6.21	7.54	6.51
	U.S. Treasury Securitie				Foreign Bonds (10-Year)	0	, ,	0.5.
	3-month	0.10	0.16	0.04	Canada	3.38	3,44	3.44
	6-month	0.19	0.31	0.81	Germany	3.34	3.48	4.02
	1-year	0.35	0.47	1.44	Japan	1.33	1.47	1.50
	5-year	2.44	2.68	2.52	United Kingdom	3.69	3.79	4.41
	10-year	3.47	3.69	3.41	Preferred Stocks	3.03	3.73	,
	10-year (inflation-prote		1.92	1.74	Utility A	6.29	5.47	6.56
	30-year	4.26	4.51	4.07	Financial A	6.73	8.72	8.77
	30-year Zero	4.37	4.60	4.11	Financial Adjustable A	5.47	5.47	5.47
	· ·				TAX-EXEMPT			
	Treasury Secu	rity Yield	Curve					
					Bond Buyer Indexes			
6.00% -		ı		———— I	20-Bond Index (GOs)	4.33	4.86	4.54
					25-Bond Index (Revs)	5.33	5.76	5.09
5.00% -				1 1	General Obligation Bonds (G			
					1-year Aaa	0.40	0.40	1.73
4.00% -					1-year A	0.90	1.10	1.83
					5-year Aaa	1.71	2.25	2.79
3.00%					5-year A	2.15	3.65	2.84
3.00 /6 ~					10-year Aaa	2.78	3.33	3.59
					10-year A	3.15	4.85	3.79
2.00% -					25/30-year Aaa	4.10	4.72	4.94
		İ			25/30-year A	4.56	6.24	5.32
1.00% -	+  V   X  +  V		Cu	rent	Revenue Bonds (Revs) (25/30-Y	ear)		
				r-Ago	Education AA	4.85	6.30	5.05
0.00% -			Yea		Electric AA	4.90	6.35	5.00
	3 6 1 2 3 5	10		30	Housing AA	5.30	6.65	5.40
3				F .				
3	Mos. Years				Hospital AA	5.35	6.60	5.45

# Federal Reserve Data

(Two		ANK RESERV Millions, Ne Recent Levels	ot Seasonally Adjusted)		e Levels Ove	er the Last
	9/9/09	8/26/09	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	823201	794546	28655	754077	773683	643434
Borrowed Reserves	320295	327647	-7352	369408	467326	513721
Net Free/Borrowed Reserves	502906	466899	36007	384669	306357	129712
	N	ONEY SUPI	'LY			
(C	ne-Week Period	; in Billions,	Seasonally Adjusted)			
		Recent Levels	<b>5</b> '	Growt	h Rates Over	the Last
	8/31/09	8/24/09	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1635.7	1639.0	-3.3	9.9%	9.6%	17.6%
M2 (M1+savings+small time deposits)	8293.7	8282.4	11.3	-3.4%	0.1%	7.6%

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		Recent (9/02/09)	3 Months Ago (6/10/09)	Year Ago (9/10/08)		Recent (9/02/09)	3 Months Ago (6/10/09)	Year Ago (9/10/08
ΓAXABLE					-			
Market	Rates				Mortgage-Backed Securities			
Discour	t Rate	0.50	0.50	2.25	GNMA 6.5%	3.77	4.26	5.31
Federal	Funds	0.00-0.25	0.00-0.25	2.00	FHLMC 6.5% (Gold)	2.90	3.07	5.36
Prime R	ate	3.25	3.25	5.00	FNMA 6.5%	2.72	2.91	5.20
30-day	CP (A1/P1)	0.21	0.34	3.00	fnma arm	2.62	2.53	3.86
3-month	LIBOR	0.30	0.64	2.82	Corporate Bonds			
Bank Cl	)s				Financial (10-year) A	6.04	6.82	6.51
6-month	ı	0.42	0.66	1.60	Industrial (25/30-year) A	5.63	6.50	6.08
1-year		0.72	0.87	2.26	Utility (25/30-year) A	5.65	6.28	6.04
5-year	CC_	2.30	1.92	4.15	Utility (25/30-year) Baa/BBB Foreign Bonds (10-Year)	6.40	7.76	6.49
	asury Securities		0.17	1.64	Canada	2.42	2.64	3.46
3-month		0.14				3.42	3.64	4.07
6-month	I	0.20	0.31	1.86 2.04	Germany	3.42	3.69	
1-year		0.38	0.53		Japan United Kingdom	1.33	1.55	1.52 4.46
5-year		2.37	2.92	2.90	Preferred Stocks	3.76	3.92	4.46
10-year	(	3.47	3.95	3.63		- 04	7.60	C 17
,	(inflation-protec		1.86	1.61	Utility A	5.84	7.62	6.12
30-year		4.33	4.76	4.23	Financial A	6.62	8.63	7.33
30-year	Zero	4.46	4.84	4.27	Financial Adjustable A	5.54	5.46	5.46
Tre	asury Secu	rity Yield	Curve		TAX-EXEMPT			
***	abux j Beeu	110) 11010		j ·	Bond Buyer Indexes			
3.00%	T-1-1				20-Bond Index (GOs)	4.37	4.71	4.62
					25-Bond Index (Revs)	5.43	5.63	5.15
5.00%		1			General Obligation Bonds (G			
	1 1				1-year Aaa	0.40	0.40	1.58
.00% -		İ			1-year A	1.10	0.90	1.68
					5-year Aaa	1.76	2.14	2.69
3.00%					5-year A	3.16	2.57	2.79
3.00 /8 7		1			10-year Aaa	2.88	3.21	3.48
					10-year A	4.40	3.57	3.68
2.00% -					25/30-year Aaa	4.21	4.72	4.53
					25/30-year A	5.75	5.16	4.77
1.00% -	$X \sqcup I$		—Cu	rrent	Revenue Bonds (Revs) (25/30-)			
			i	ar-Ago	Education AA	5.50	5.85	4.87
0.00%			10.		Electric AA	5.55	5.95	4.92
3 6 1	2 3 5	10		30	Housing AA	6.05	6.25	5.13
Mos. Y	ears				Hospital AA	6.05	6.20	5.15
					, rooprea.	0.00	0.20	

### Federal Reserve Data

(Two-	_		ot Seasonally Adj	justed)			
		Recent Levels			Averag	e Levels Ove	
	8/26/09	8/12/09	Change		12 Wks.	26 Wks.	52 Wks.
Excess Reserves	794546	708501	86045		756262	762985	613021
Borrowed Reserves	327647	340534	-12887		394750	486512	508084
Net Free/Borrowed Reserves	466899	367967	98932		361513	276473	104936
	· N	ONEY SUPI	'LY				
(Or	e-Week Period	; in Billions,	Seasonally Adjus	sted)			
,		Recent Level			Growt	h Rates Over	the Last
	8/24/09	8/17/09	Change		3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1639.0	1656.3	-17.3		9.4%	12.4%	18.0%
M2 (M1+savings+small time deposits)	8282.4	<b>8</b> 310.5	-28.1		-4.3%	0.5%	7.6%

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	Recent (9/02/09)	3 Months Ago (6/3/09)	Year Ago (9/03/08)		Recent (9/02/09)	3 Months Ago (6/3/09)	Year Ago (9/03/08
TAXABLE							
Market Rates				Mortgage-Backed Securities			
Discount Rate	0.50	0.50	2.25	GNMA 6.5%	3.92	3.37	5.60
Federal Funds	0.00-0.25	0.00-0.25	2.00	FHLMC 6.5% (Gold)	3.07	2.89	5.67
Prime Rate	3.25	3.25	5.00	FNMA 6.5%	2.85	2.78	5.48
30-day CP (A1/P1)	0.23	0.28	2.88	FNMA ARM	2.62	2.53	3.89
3-month LIBOR	0.33	0.64	2.81	Corporate Bonds			
Bank CDs				Financial (10-year) A	5.79	6.82	6.69
6-month	0.42	0.70	1.60	Industrial (25/30-year) A	5,43	6.35	6.11
1-year	0.72	0.92	2.26	Utility (25/30-year) A	5.45	6.17	6.13
5-year	2.25	1.92	4.15	Utility (25/30-year) Baa/BBB	6.14	7.83	6.54
U.S. Treasury Securitie	3			Foreign Bonds (10-Year)			
3-month	0.13	0.12	1.68	Canada	3.33	3.36	3.48
6-month	0.21	0.25	1.90	Germany	3.23	3.57	4.14
1-year	0.38	0.44	2.07	Japan	1.32	1.55	1.47
5-year	2.27	2.42	2.95	United Kingdom	3.55	3.79	4.50
10-year	3.31	3.54	3.70	Preferred Stocks			
10-year (inflation-prote	cted) 1.74	1.63	1.64	Utility A	6.37	6.10	6.16
30-year	4.12	4.45	4.32	Financial A	5.94	8.35	6.97
30-year Zero	4.22	4.53	4.37	Financial Adjustable A	5.53	5.53	5.53
Treasury Secu	rity Viold	Curvo		AX-EXEMPT			
rreasury secu	inty menu	Curve	1	Bond Buyer Indexes			
6.00%				20-Bond Index (GOs)	4.53	4.61	4.68
				25-Bond Index (Revs)	5.99	5.53	5.17
5.00% -				General Obligation Bonds (G	Os)		
				1-year Aaa	0.40	0.40	1.58
4.00% -				1-year A	0.90	1.13	1.68
4.00 /8 7				5-year Aaa	1.80	2.02	2.74
			1.1	5-year A	2.24	3.45	2.84
3.00%				10-year Aaa	2.93	3.01	3.55
				10-year A	3.30	4.55	3.75
2.00%				25/30-year Aaa	4.36	4.64	4.69
				25/30-year A	4.82	6.16	5.07
1.00% -	Ì		rrent	Revenue Bonds (Revs) (25/30-Y	ear)		
	1		1 1	Education AA	5.30	6.20	4.85
0.00%		Yea	ar-Ago	Electric AA	5.40	6.25	4.80
3 6 1 2 3 5	10		30	Housing AA	5,55	6.55	5.15
Mos. Years							

# Federal Reserve Data

Toll Road Aaa

/Tuo 1		ANK RESERV	' <b>ES</b> ot Seasonally Adjusted,			
(100-1	veek i ellou, ii	Recent Levels	, ,		e Levels Ove	r the Last
	8/26/09	8/12/09	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	794546	708501	86045	756262	762985	613020
Borrowed Reserves	327647	340534	-12887	394750	486512	508084
Net Free/Borrowed Reserves	466899	367967	98932	361512	276473	104936
		ONEY SUPE	rLY			
(On	e-Week Period	; in Billions,	Seasonally Adjusted)			
		Recent Levels		Growt	h Rates Over	the Last
	8/17/09	8/10/09	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1658.2	1663.6	-5.4	17.9%	13.1%	19.9%
M2 (M1+savings+small time deposits)	8312.4	8318.3	-5.9	-1.5%	1.1%	8.1%

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6.30

4.80

	Recent (8/26/09)	3 Months Ago (5/27/09)	Year Ago (8/27/08)		Recent (8/26/09)	3 Months Ago (5/27/09)	Year Ago (8/27/08
TAXABLE			1				
Market Rates				Mortgage-Backed Securities			
Discount Rate	0.50	0.50	2.25	GNMA 6.5%	3.95	3.34	5.62
Federal Funds	0.00-0.25	0.00-0.25	2.00	FHLMC 6.5% (Gold)	2.95	2.61	5.66
Prime Rate	3.25	3.25	5.00	FNMA 6.5%	2.73	2.28	5.56
30-day CP (A1/P1)	0.24	0.31	2.84	FNMA ARM	2.75	2.78	4.02
3-month LIBOR	0.37	0.67	2.81	Corporate Bonds			
Bank CDs				Financial (10-year) A	6.13	7.00	6.60
6-month	0.48	0.69	1.60	Industrial (25/30-year) A	5.52	6.61	6.18
1-year	0.72	0.92	2.26	Utility (25/30-year) A	5.53	6.44	6.15
5-year	2.25	1.92	4.15	Utility (25/30-year) Baa/BBB	6.17	8.01	6.57
U.S. Treasury Securities				Foreign Bonds (10-Year)		0.0.	0.07
3-month	0.15	0.16	1.67	Canada	3,40	3.57	3.53
6-month	0.25	0.29	1.94	Germany	3.24	3.63	4.17
1-year	0.45	0.47	2.15	Japan	1.32	1.48	1.45
5-year	2.44	2.44	3.01	United Kingdom	3.55	3.75	4.51
10-year	3.43	3.74	3.76	Preferred Stocks	3.55	3.73	
10-year (inflation-protec		1.81	1.51	Utility A	6.34	6.08	6.16
30-year	4.20	4.63	4.38	Financial A	5.99	8.28	7.08
30-year Zero	4.29	4.74	4.44	Financial Adjustable A	5.52	5.53	5.53
<b></b>	4. X70 1 1	~		AX-EXEMPT			
Treasury Secur	rity Yield	Curve	''	Bond Buyer Indexes			
6.00%	·			20-Bond Index (GOs)	4.58	4.44	4.64
B.00%				25-Bond Index (Revs)	5.62	5.42	5.15
				General Obligation Bonds (G		5.42	5.15
5.00% -				1-year Aaa		0.43	1 5 6
				1-year A	0.40 1.10	0.42	1.56 1.66
4.00% -				•		1.15	2.79
				5-year Aaa	1.81	1.87	
3.00% -				5-year A	3.21	3.29	2.89
	Ì			10-year Aaa	2.96	2.84	3.60
2.00%				10-year A	4.48	4.40	3.80
2.00%	ļ			25/30-year Aaa	4.54	4.41	4.71
				25/30-year A	6.05	5.89	4.95
1.00% -		Cui	rent	Revenue Bonds (Revs) (25/30-Y			
		Yea	ar-Ago	Education AA	5.80	5.94	5.05
0.00% 3 6 1 2 3 5	10		30	Electric AA	5.85	6.04	5.10
3 6 1 2 3 5 Mos. Years	10		30	Housing AA	6.35	6.34	5.25
MOS. ICAIS			l.	Hospital AA	6.35	6.29	5.30
			ł .	1 103pital 71/1	0.55	0.29	3.30

# Federal Reserve Data

(Two-	-	ANK RESERN Millions, No Recent Levels	ot Seasonally Adjusted)	Averag	e Levels Ove	r the Last
	8/12/09	7/29/09	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	708499	728888	-20389	768051	749904	583661
Borrowed Reserves	340534	347217	-6683	427197	503204	502158
Net Free/Borrowed Reserves	367965	381671	-13706	340854	246700	81504
	N	MONEY SUPI	PLY			
(Or	e-Week Perioa	; in Billions,	Seasonally Adjusted)			
		Recent Level	5	Growt	h Rates Over	the Last
	8/10/09	8/3/09	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1663.8	1677.2	-13.4	17.9%	12.1%	18.7%
M2 (M1+savings+small time deposits)	8318.3	8323.9	-5.6	-0.7%	1.6%	7.9%

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# LITCHFIELD PARK SERVICE COMPANY DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104 TABLE OF CONTENTS TO SCHEDULES WAR

# SCHEDULE #

COST OF CAPITAL SUMMARY	DCF COST OF EQUITY CAPITAL	DIVIDEND YIELD CALCULATION	DIVIDEND GROWTH RATE CALCULATION	DIVIDEND GROWTH COMPONENTS	GROWTH RATE COMPARISON	CAPM COST OF EQUITY CAPITAL	ECONOMIC INDICATORS - 1990 TO PRESENT	CAPITAL STRUCTURES OF SAMPLE COMPANIES
WAR - 1	WAR - 2	WAR - 3	WAR - 4	WAR - 5	WAR - 6	WAR - 7	WAR - 8	WAR - 9

# TEST YEAR ENDED SEPTEMBER 30, 2008 LITCHFIELD PARK SERVICE COMPANY COST OF CAPITAL SUMMARY

SCHEDULE WAR - 1, PAGE 1 OF 3 DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104

# WEIGHTED AVERAGE COST OF CAPITAL

(F)	COST RATE		1.14%	6.58%	
(E)	COST	%00.0	6.39%	8.01%	
(D)	CAPITAL RATIO	0.00%	17.83%	82.17%	100.00%
(O)	RUCO RECOMMENDED	69	11,506,844	53,027,765	\$ 64,534,609
(B)	RUCO ADJUSTED	· ↔	ı	•	٠ <del>د</del>
(A)	COMPANY PROPOSED	₩	11,506,844	53,027,765	\$ 64,534,609
	DESCRIPTION	SHORT-TERM DEBT	LONG-TERM DEBT	COMMON EQUITY	TOTAL CAPITALIZATION \$
	NO.	<b>~</b>	7	ო	4

WEIGHTED AVERAGE COST OF CAPITAL 2

# REFERENCES:

COLUMN (A): COMPANY SCHEDULE D-1 COLUMN (B): TESTIMONY, WAR

COLUMN (C): COLUMN (A) + COLUMN (B)
COLUMN (D): LINES 1, 2 AND 3 DIVIDED BY LINE 4
COLUMN (E): SCHEDULE WAR-1, PAGES 2 AND 3
COLUMN (F): COLUMN (D) × COLUMN (E)

TEST YEAR ENDED SEPTEMBER 30, 2008 COST OF CAPITAL SUMMARY LITCHFIELD PARK SERVICE COMPANY

DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104 SCHEDULE WAR - 1, PAGE 2 OF 3

# WEIGHTED COST OF DEBT

		€		(B)	<u>(</u> )	( <u>0</u> )	(E)
LINE NO.	SYSTEM	AMOUNT OUTSTANDING	A N	ANNUAL INTEREST	INTEREST	COST	WEIGHTED
~	1999 INDUSTRIAL DEVELOPMENT AUTHORITY BONDS	\$ 4,283,875	↔	251,892	5.88%	37.23%	2.19%
7	2001 INDUSTRIAL DEVELOPMENT AUTHORITY BONDS	7,222,969		483,939	6.70%	62.77%	4.21%
က	3 TOTALS	\$ 11,506,844	ь	735,831	п	100.00%	
4	WEIGHTED COST OF DEBT						6.39%

REFERENCES:

COLUMN (A): COMPANY SCHEDULE D-2
COLUMN (B): COMPANY SCHEDULE D-2
COLUMN (C): COLUMN (A) + COLUMN (B)
COLUMN (D): LINES 1 AND 2 DIVIDED BY LINE 3
COLUMN (E): COLUMN (C) x COLUMN (D)

# LITCHFIELD PARK SERVICE COMPANY TEST YEAR ENDED SEPTEMBER 30, 2008 COST OF CAPITAL SUMMARY

DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104 SCHEDULE WAR-1, PAGE 3 OF 3

# COST OF COMMON EQUITY CALCULATION

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DCF METHODOLOGY		
DCF - WATER COMPANY SINGLE-STAGE CONSTANT GROWTH MODEL ESTIMATE	9.94%	SCHEDULE WAR-2, COLUMN (C), LINE 5
DCF - NATURAL GAS LDC SINGLE-STAGE CONSTANT GROWTH MODEL ESTIMATE	9.50%	SCHEDULE WAR-2, COLUMN (C), LINE 13
AVERAGE OF DCF ESTIMATES	9.72%	9.72% (LINE 2 + LINE 3) + 2
CAPM METHODOLOGY		
CAPM - WATER COMPANY GEOMETRIC MEAN ESTIMATE	5.92%	SCHEDULE WAR-7 PAGE 1, COLUMN (B), LINE 5
CAPM - NATURAL GAS LDC GEOMETRIC MEAN ESTIMATE	5.25%	SCHEDULE WAR-7 PAGE 1, COLUMN (B), LINE 13
CAPM - WATER COMPANY ARITHMETIC MEAN ESTIMATE	7.49%	SCHEDULE WAR-7 PAGE 2, COLUMN (B), LINE 5
CAPM - NATURAL GAS LDC ARITHMETIC MEAN ESTIMATE	6.51%	SCHEDULE WAR-7 PAGE 2, COLUMN (B), LINE 13
AVERAGE OF CAPM ESTIMATES	6.29%	(SUM OF LINES 6 THRU 9) ÷ 4
AVERAGE OF DCF AND CAPM ESTIMATES	8.01%	(SUM OF LINES 4 AND 10) +2

10

0

LITCHFIELD PARK SERVICE COMPANY TEST YEAR ENDED SEPTEMBER 30, 2008 DCF COST OF EQUITY CAPITAL

DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104 SCHEDULE WAR - 2

Щ	STOCK		(A) DIVIDEND		(B) GROWTH		(C) DCF COST OF
N O	SYMBOL	COMPANY	YIELD	+	RATE (g)	1	EQUITY CAPITAL
~	AWR	AMERICAN STATES WATER CO.	2.83%	+	9.03%	H	11.86%
2	CWT	CALIFORNIA WATER SERVICE GROUP	3.09%	+	6.70%	II	9.79%
ო	SWWC	SOUTHWEST WATER COMPANY	1.96%	+	7.20%	II	9.16%
4	WTR	AQUA AMERICA, INC.	3.18%	+	5.78%	II	8.96%
5	WATER COM	WATER COMPANY AVERAGE					9.94%

9	AGL	AGL RESOURCES, INC.	4.93%	+	2.95%	II	10.87%
7	АТО	ATMOS ENERGY CORP.	4.69%	+	4.42%	II	9.10%
8	Pl	LACLEDE GROUP, INC.	4.72%	+	5.12%	11	9.84%
6	NJR	NEW JERSEY RESOURCES CORPORATION	3.42%	+	2.68%	Ħ	9.10%
10	GAS	NICOR, INC.	5.10%	+	5.18%	II	10.28%
<del>-</del>	ZWZ	NORTHWEST NATURAL GAS CO.	3.74%	+	4.95%	II	8.69%
12	≻NA	PIEDMONT NATURAL GAS COMPANY	4.51%	+	4.75%	11	9.27%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	3.39%	+	7.88%	II	11.28%
4	SWX	SOUTHWEST GAS CORPORATION	3.76%	+	4.00%	II	7.77%
15	WGL	WGL HOLDINGS, INC.	4.47%	+	4.38%	11	8.85%
16	NATURAL GA	NATURAL GAS LDC AVERAGE					9.50%

REFERENCES:
COLUMN (A): SCHEDULE WAR-3, COLUMN C
COLUMN (B): SCHEDULE WAR-4, PAGE 1, COLUMN C
COLUMN (C): COLUMN (A) + COLUMN (B)

# TEST YEAR ENDED SEPTEMBER 30, 2008 DIVIDEND YIELD CALCULATION LITCHFIELD PARK SERVICE COMPANY

DOCKET NO. SW-01428A-09-010; DOCKET NO. W-01427A-09-0104 SCHEDIII F WAR - 3

(O)	DIVIDEND YIELD	2.83%	3.09%	1.96%	3.18%	2.77%	4.93%	4.69%	4.72%	3.42%	5.10%	3.74%	4.51%	3.39%	3.76%	4.47%	4.27%
	11	п	II	II	н	الـــا	11	п	п	н	II	11	н	11	li	11	الـــا
(B) AVERAGE	STOCK PRICE (PER SHARE)	\$35.29	38.22	5.11	16.96		\$34.92	28.16	32.64	36.30	36.45	42.28	23.94	35.11	25.29	33.10	
	+	4	+	-1-	4.		+	+	+	-1-	4.	+1-	4	4.	+	+	
(A) ESTIMATED	DIVIDEND (PER SHARE)	\$1.00	1.18	0.10	0.54		\$1.72	1.32	1.54	1.24	1.86	1.58	1.08	1.19	0.95	1.48	
	COMPANY	AMERICAN STATES WATER CO.	CALIFORNIA WATER SERVICE GROUP	SOUTHWEST WATER COMPANY	AQUA AMERICA, INC.	VY AVERAGE	AGL RESOURCES, INC.	ATMOS ENERGY CORP.	LACLEDE GROUP, INC.	NEW JERSEY RESOURCES CORPORATION	NICOR, INC.	NORTHWEST NATURAL GAS CO.	PIEDMONT NATURAL GAS COMPANY	SOUTH JERSEY INDUSTIES, INC.	SOUTHWEST GAS CORPORATION	WGL HOLDINGS, INC.	.DC AVERAGE
	STOCK SYMBOL	AWR	CWT	SWWC	WTR	WATER COMPANY AVERAGE	AGL	АТО	97	NJR	GAS	NWN	PNY	SJI	SWX	WGL	NATURAL GAS LDC AVERAGE
	NO NO	-	2	က	4	5	9	7	∞	6	10	7	12	13	4	15	16

# REFERENCES:

COLUMN (A): ESTIMATED 12 MONTH DIVIDEND REPORTED IN VALUE LINE INVESTMENT
SURVEY - RATINGS & REPORTS DATED 10/23/2009 (WATER COMPANIES) AND 09/11/2009 (NATURAL GAS LDC's).
COLUMN (B): EIGHT WEEK AVERAGE OF CLOSING PRICES FROM 08/24/2009 TO 10/16/2009
STOCK QUOTES OBTAINED THROUGH BIG CHARTS WEB SITE - HISTORICAL QUOTES (www.bigcharts.com).
COLUMN (C): COLUMN (A) / COLUMN (B)

TEST YEAR ENDED SEPTEMBER 30, 2008 DIVIDEND GROWTH RATE CALCULATION LITCHFIELD PARK SERVICE COMPANY

DOCKET NO. W-01427A-09-0104 SCHEDULE WAR - 4, PAGE 1 OF 2 **DOCKET NO. SW-01428A-09-0103** 

(C) DIVIDEND GROWTH (g)	9.03%	%02'9	7.20%	5.78%	7.18%	5.95%	4.42%	5.12%	5.68%	5.18%	4.95%	4.75%	7.88%
_	Ш	11	11	П		II	II	н	П	п	II	П	П
(B) EXTERNAL GROWTH (sv)	2.83%	0.70%	0.05%	0.28%		0.45%	0.32%	0.62%	0.58%	0.08%	0.35%	%00'0	%88.0
+	+	+	+	+		+	+	+	+	+	+	+	+
(A) INTERNAL GROWTH (br)	6.20%	%00'9	7.15%	2.50%		2.50%	4.10%	4.50%	5.10%	5.10%	4.60%	4.75%	7.00%
COMPANY	AMERICAN STATES WATER CO.	CALIFORNIA WATER SERVICE GROUP	SOUTHWEST WATER COMPANY	AQUA AMERICA, INC.	WATER COMPANY AVERAGE	AGL RESOURCES, INC.	ATMOS ENERGY CORP.	LACLEDE GROUP, INC.	NEW JERSEY RESOURCES CORPORATION	NICOR, INC.	NORTHWEST NATURAL GAS CO.	PIEDMONT NATURAL GAS COMPANY	SOUTH JERSEY INDUSTIES, INC.
STOCK	AWR	CWT	SWWC	WTR	WATER CON	AGL	АТО	PC	NJR	GAS	ZMZ	₽N≺	SJI
LINE O O	~	2	ო	4	2	9	7	∞	6	10	7	12	13

16

REFERENCES:
COLUMN (A): TESTIMONY, WAR
COLUMN (B): SCHEDULE WAR - 4, PAGE 2, COLUMN C
COLUMN (C): COLUMN (A) + COLUMN (B)

5.23%

4.00%

П

0.00%

4.00%

SOUTHWEST GAS CORPORATION

SWX

7

WGL HOLDINGS, INC.

WGL

15

4.38%

II

0.03%

4.35%

NATURAL GAS LDC AVERAGE

LITCHFIELD PARK SERVICE COMPANY TEST YEAR ENDED SEPTEMBER 30, 2008 DIVIDEND GROWTH RATE CALCULATION

DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104 SCHEDULE WAR - 4, PAGE 2 OF 2

(C) EXTERNAL	GROWTH (sv)	2.83%	0.70%	0.05%	0.28%	%96.0	0.45%	0.32%	0.62%	0.58%	0.08%	0.35%	%00.0	0.88%	%00.0	0.03%	0.33%
	, ,	II	н	II	Ш		H	II	11	U	II	II	II	П	И	п	
	7	7	1	7	_			_	_	_		_	<del>-</del>	_	~	<b>←</b>	
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(B)	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	
	(B)	3	4	6	~		_		~ 8	3	2	0	8	~ 8	<u> </u>	0	
	* <b>∑</b>	2.13	1.94	1.09	2.11		1.51	1.17	1.38	1.93	1.65	1.70	1.88	1.88	1.00	1.50	
	{ [ ( M + B	)	)	) ]	) ]		<u> </u>	))]}	)	) ]	)	<u> </u>	)	))]}	))]}	) ) ] }	
		-	-	}	<del>-</del>		}		-	-	-	_ -	<u>_</u>				
	× _	×	×	×	×		×	×	×	×	×	×	×	×	×	×	
€	SHARE	5.00%	1.50%	1.10%	0.50%		1.75%	3.75%	3.25%	1.25%	0.25%	1.00%	0.01%	2.00%	2.50%	0.10%	
	COMPANY	AMERICAN STATES WATER CO.	CALIFORNIA WATER SERVICE GROUP	SOUTHWEST WATER COMPANY	AQUA AMERICA, INC.	WATER COMPANY AVERAGE	AGL RESOURCES, INC.	ATMOS ENERGY CORP.	LACLEDE GROUP, INC.	NEW JERSEY RESOURCES CORPORATION	NICOR, INC.	NORTHWEST NATURAL GAS CO.	PIEDMONT NATURAL GAS COMPANY	SOUTH JERSEY INDUSTIES, INC.	SOUTHWEST GAS CORPORATION	WGL HOLDINGS, INC.	AS LDC AVERAGE
	SYMBOL	AWR	CWT	SWWC	WTR	WATER COM	AGL	АТО	P	NJR	GAS	NWN	₽NY	S	SWX	WGL	NATURAL GAS LDC
	L INE	-	2	က	4	Ω	ဖ	7	ω	6	10	7	12	13	4	15	16

REFERENCES:
COLUMN (A): TESTIMONY, WAR
COLUMN (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 10/23/2009 (WATER COMPANIES) AND 09/11/2009 (NATURAL GAS LDC's)
COLUMN (C): COLUMN (A) x COLUMN (B)

LITCHFIELD PARK SERVICE COMPANY TEST YEAR ENDED SEPTEMBER 30, 2008 DIVIDEND GROWTH COMPONENTS

DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104 SCHEDULE WAR - 5, PAGE 1 OF 4

(F) SHARE GROWTH	0.81% 6.94% 4.11% 2.94%	3.06% 1.35% 1.86% 1.66%	5.16% 0.40% 1.20% 1.25%	0.47% 0.42% 0.39%
(E) SHARES OUTST. (MILLIONS)	16.75 16.80 17.05 17.23 17.30 18.50 18.75	18.37 18.39 20.66 20.67 20.72 21.00 21.50 22.50	20.36 22.33 22.33 24.27 24.20 25.00 25.50	127.18 128.97 132.33 133.40 135.37 136.00 136.00
(D) BOOK VALUE (\$/SHARE)	15.01 15.72 16.64 17.53 17.95 5.00%	15.66 15.79 18.15 19.44 6.50%	6.17 6.49 6.38 6.54 4.55 7.00%	5.89 6.30 6.96 7.32 7.82 10.00%
(C) DIVIDEND GROWTH (g)	1.01% 2.70% 2.56% 3.79% 3.05% 4.63% 4.97% 6.23%	2.03% 2.09% 0.96% 1.84% 3.80% 5.04% 4.82% 5.93%	0.78% 2.06% 2.66% 0.83% NME 1.58% 2.80% 5.80%	4.51% 4.89% 3.71% 3.14% 2.80% 3.81% 3.59% 4.16% 5.52%
(B) RETURN ON BOOK EQUITY (r) =	6.60% 8.50% 8.10% 9.30% 10.00% 12.00%	9.00% 9.30% 6.80% 8.10% 9.90% 11.50% 12.00%	3.60% 5.00% 3.20% 5.00% 6.00%	10.70% 10.00% 9.70% 9.30% 11.00% 11.50%
(A) RETENTION RATIO (b) ×	0.1524 0.3182 0.3158 0.4074 0.3548 8 0.4632 0.4732 0.5192	0.2260 0.2245 0.1418 0.2267 0.3842 8 0.4591 0.4943	0.2174 0.4118 0.4750 0.2581 -5.0000 8 0.9333 0.9667 0.9000	0.4219 0.4366 0.3714 0.3239 0.3014 8 0.3415 0.3778
OPERATING PERIOD	2004 2005 2006 2007 2008 GROWTH 2004 - 2008 2009 2010	2004 2005 2006 2007 2008 GROWTH 2004 - 2008 2009 2010	2004 2005 2006 2007 2008 GROWTH 2004 - 2008 2009 2010	2004 2005 2006 2007 2008 [GROWTH 2004 - 2008 2010 2010
WATER COMPANY NAME	AMERICAN STATES WATER CO.	CALIFORNIA WATER SERVICE GROUP	SOUTHWEST WATER COMPANY	AQUA AMERICA, INC.
STOCK	AWR	CWT	SWWC	WTR
NO.	− u u 4 n o r o o o	5	3	38 33 33 33 33 33 33 33 33 33 33 33 33 3

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 10/23/2009
COLUMN (C): COLUMN (A) × COLUMN (B)
COLUMN (C): LINES 6, 16, 26 & 36, SIMPLE AVERAGE GROWTH, 2004 - 2008

COLUMN (D): VALUE LINE INVESTMENT SURVEY COLUMN (D): LINES 6, 16 & 26, COMPOUND GROWTH RATE COLUMN (E): VALUE LINE INVESTMENT SURVEY COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

LITCHFIELD PARK SERVICE COMPANY TEST YEAR ENDED SEPTEMBER 30, 2008 DIVIDEND GROWTH COMPONENTS

DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104 SCHEDULE WAR - 5, PAGE 2 OF 4

(F) SHARE GROWTH	0.07% 1.43% 1.36% 2.02%	9.66% 1.86% 1.47% 3.91%	1.18% 2.32% 2.27% 3.41%	0.27% 1.05% 1.11% 1.36%
(E) SHARES OUTST. (MILLIONS)	76.70 77.70 77.70 76.40 76.90 78.00 79.00 85.00	62.80 80.54 81.74 89.33 90.81 92.50 93.50	20.98 21.17 21.36 21.65 21.99 22.50 23.00 26.00	41.61 41.32 41.44 41.61 42.06 43.00 45.00
(D) BOOK VALUE (\$/SHARE)	18.06 19.29 20.71 21.74 21.48 10.00%	18.05 19.90 20.16 22.01 7.50% 4.00%	16.96 17.31 18.85 19.79 22.12 5.50%	11.25 10.60 15.00 15.50 17.28 11.50%
(C) DIVIDEND GROWTH (g)	5.45% 6.14% 6.02% 5.04% 4.79% 4.17% 4.17% 6.02%	1.73% 2.37% 3.63% 2.96% 3.08% 3.34% 3.52% 4.18%	2.61% 3.04% 5.12% 4.32% 5.14% 5.78% 4.36% 4.36%	7.47% 8.26% 6.13% 3.52% 9.25% 6.93% 6.42% 6.84%
(B) RETURN ON BOOK EQUITY (r) =	11.00% 12.90% 13.20% 12.70% 11.50% 14.00%	7.60% 8.50% 9.80% 8.70% 9.00% 9.50%	10.10% 10.90% 12.50% 11.60% 12.00% 11.00%	15.30% 17.00% 12.60% 10.10% 15.70% 13.00% 10.00%
(A) RETENTION RATIO (b) x	0.4956 0.4758 0.4559 0.3971 0.3801 0.3630 0.3931 0.4303	0.2278 0.2791 0.3700 0.3402 0.3600 88 0.3714 0.3909	0.2582 0.2789 0.4093 0.3723 0.4356 8 0.3962 0.3962	0.4882 0.4859 0.4866 0.3484 0.5889 8 0.5259 0.5000
OPERATING PERIOD	2004 2005 2006 2007 2008 [GROWTH 2004 - 2008 2009 2010	2004 2005 2006 2007 2008 GROWTH 2004 - 2008 2009 2010	2004 2005 2006 2007 2008 [GROWTH 2004 - 2008 2009 2010	ATION 2004 2005 2006 2007 2008 [GROWTH 2004 - 200 2009 2010
NATURAL GAS LDC NAME	AGL RESOURCES, INC.	ATMOS ENERGY CORP.	LACLEDE GROUP, INC.	NEW JERSEY RESOURCES CORPORATION 2004 2005 2006 2007 2008 [GROWTH 2004 - 2008 2009 2010
STOCK	AGL	АТО	P	K K
LI NE	- 0 6 4 5 6 V 8 9 6	5	52 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

COLUMN (D): VALUE LINE INVESTMENT SURVEY COLUMN (D): LINES 6, 16 & 26, COMPOUND GROWTH RATE COLUMN (E): VALUE LINE INVESTMENT SURVEY COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 09/11/2009
COLUMN (C): COLUMN (A) × COLUMN (B)
COLUMN (C): LINES 6, 16, 26 & 36, SIMPLE AVERAGE GROWTH, 2004 - 2008

LITCHFIELD PARK SERVICE COMPANY TEST YEAR ENDED SEPTEMBER 30, 2008 DIVIDEND GROWTH COMPONENTS

DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104 SCHEDULE WAR - 5, PAGE 3 OF 4

(F) SHARE GROWTH	0.58% 0.82% 0.41% 0.16%	-0.97% 0.00% 0.00% 1.11%	-1.13% 0.33% 0.16% -0.07%	1.73% 0.91% 2.11% 2.11%
(E) SHARES OUTST. (MILLIONS)	44.10 44.18 45.90 45.13 45.50 45.50 45.50	27.55 27.58 27.24 26.41 26.50 26.50 28.50	76.67 76.70 74.61 73.28 73.26 73.50 73.50	27.76 28.98 29.33 29.61 29.73 30.00 31.00
(D) BOOK VALUE (\$/SHARE)	16.99 18.36 19.43 20.58 21.55 4.00% 4.50%	20.64 21.28 22.01 22.52 23.71 3.50%	11.15 11.53 11.89 11.99 12.11 6.000/	12.41 13.50 15.11 16.25 17.33 11.00%
(C) DIVIDEND GROWTH (g)	2.12% 2.28% 5.17% 3.60% 3.71% 4.33% 5.13%	2.68% 3.71% 4.45% 5.98% 4.45% 4.82% 4.52% 4.52%	3.67% 3.57% 2.77% 3.49% 3.83% 4.14% 4.51%	6.01% 6.16% 10.20% 6.61% 6.69% 6.25% 6.98%
(B) RETURN ON BOOK EQUITY (r)	13.10% 12.55% 14.70% 12.30% 11.50% 12.50%	8.90% 9.90% 10.90% 12.50% 11.00% 11.00%	11.10% 11.50% 11.00% 11.90% 12.40% 12.50% 12.50%	12.50% 12.40% 16.30% 12.80% 13.10% 13.50% 13.50%
(A) RETENTION RATIO (b) ×	0.1622 0.1806 0.3519 0.3779 0.2928 8 0.2928 0.2706	0.3011 0.3744 0.4085 0.4783 0.4086 0.4105 0.4203	0.3307 0.3106 0.2620 0.2929 0.3087 8 0.3313 0.3471	0.4810 0.4971 0.6260 0.5167 0.5110 8 0.5000 0.5170
OPERATING PERIOD	2004 2005 2006 2007 2008 GROWTH 2004 - 2008 2009 2010 2011	2004 2005 2006 2007 2008  GROWTH 2004 - 2008 2009 2010 2010	2004 2005 2006 2007 2008 GROWTH 2004 - 2008 2009 2010	2004 2005 2006 2007 2008  GROWTH 2004 - 2008 2010 2010
NATURAL GAS LDC NAME	NICOR, INC.	NORTHWEST NATURAL GAS CO.	PIEDMONT NATURAL GAS COMPANY	SOUTH JERSEY INDUSTIES, INC.
STOCK	GAS	NWN	₽N₹	S
LINE NO.	- u u 4 n o r o o ó	5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	22222222	88888888888

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 09/11/2009
COLUMN (C): COLUMN (A) × COLUMN (B)
COLUMN (C): LINES 6, 16, 26 & 36, SIMPLE AVERAGE GROWTH, 2004 - 2008

COLUMN (D): VALUE LINE INVESTMENT SURVEY COLUMN (D): LINES 6, 16 & 26, COMPOUND GROWTH RATE COLUMN (E): VALUE LINE INVESTMENT SURVEY COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

LITCHFIELD PARK SERVICE COMPANY TEST YEAR ENDED SEPTEMBER 30, 2008 DIVIDEND GROWTH COMPONENTS

(F) SHARE GROWTH	4.69% 2.96% 3.13% 2.50%	0.64% 0.16% 0.08% 0.03%
(E) SHARES OUTST. (MILLIONS)	36.79 39.33 41.77 42.81 44.19 45.50 50.00	48.67 48.85 49.45 49.45 50.00 50.00
(D) BOOK VALUE (\$/SHARE)	19.18 19.10 21.58 22.98 23.49 5.00%	16.95 17.80 18.86 19.83 20.99 4.50%
(C) DIVIDEND GROWTH (g)	4.20% 2.20% 5.21% 4.75% <u>2.08%</u> 3.69% 3.55% 4.00%	4.02% 4.45% 3.13% 3.65% 4.90% 4.02% 4.84% 4.84% 4.36%
(B) RETURN ON BOOK EQUITY (r) =	8.30% 6.40% 8.90% 8.50% 7.00% 7.50% 8.00%	11.70% 10.30% 10.40% 11.60% 11.50% 11.00%
(A) RETENTION RATIO (b) ×	0.5060 0.3440 0.5859 0.5590 0.3525 0.4571 0.5000	0.3434 0.3803 0.3041 0.3476 0.4221 0.4078 0.4078
OPERATING PERIOD	2004 2005 2006 2007 2008 GROWTH 2004 - 2008 2009 2010 2010	2004 2005 2006 2007 2008 GROWTH 2004 - 2008 2009 2010
NATURAL GAS LDC NAME	SOUTHWEST GAS CORPORATION	WGL HOLDINGS, INC.
STOCK	XMX	WGL
NO NE	- 0 % 4 tv 0 r & 0	0 1 2 2 2 4 2 5 5 7 8 6

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 09/11/2009
COLUMN (C): COLUMN (A) × COLUMN (B)
COLUMN (C): LINES 6 & 16, SIMPLE AVERAGE GROWTH, 2004 - 2008

DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104 SCHEDULE WAR - 6

# WATER COMPANY SAMPLE:

	71.03	MACANICA IN	marto, e	Tapenson (	_	para i
BVPS	4.57%	5.55%	-7.33%	7.34%	2.53%	
(F) 5 - YEAR COMPOUND HISTORY DPS	2.96%	0.87%	7.46%	8.35%	4.91%	1.23%
EPS	10.23%	6.81%	-35.42%	3.34%	-3.76%	
(E) VALUE LINE & ZACKS AVGS.	4.93%	4.71%	-1.00%	7.57%		4.05%
BVPS	5.00%	6.50%	7.00%	10.00%	7.13%	
(D) VALUE LINE HISTORIC DPS	2.00%	0.50%	8.50%	8.00%	4.75%	4.63%
EPS	5.50%	7.00%	######	5.50%	2.00%	
BVPS	4.00%	3.50%	1.5%	6.50%	4.67%	
(C) VALUE LINE PROJECTED DPS	4.50%	2.50%	-22.50%	5.50%	-2.50%	3.74%
EPS	9.50%	4.75%	12.00%	10.00%	%90.6	tion de
(B) ZACKS EPS	4.00%	8.20%		7.50%	er delet	6.57%
(A) (br)+(sv)	8:03%	6.70%	7.20%	5.78%		7.18%
SYMBOL	AWR	CWT	SWWC	WTR		AVERAGES [
LINE SO.	-	8	ო	4	2	9

# NATURAL GAS LDC SAMPLE:

1.4	BVPS	4.43%	5.78%	6.87%	11.33%	6.12%	3.53%	2.09%	8.71%	5.20%	5.49%	5.95%	
(F)	5 - YEAR COMPOUND HISTORY DPS	9.94%	1.60%	2.50%	6.28%	0.00%	3.99%	4.92%	7.86%	2.35%	2.05%	4.15%	5.36%
	EPS	4.41%	6.07%	9.74%	12.26%	4.33%	8.42%	4.07%	9.48%	4.34%	5.36%	2.98%	
(E)	VALUE LINE & ZACKS AVGS.	2.53%	4.07%	4.43%	7.29%	2.78%	5.14%	5.29%	8.30%	2.00%	3.79%		5.16%
59	BVPS	10.00%	7.50%	5.50%	11.50%	4.00%	3.50%	%00.9	11.00%	2.00%	4.50%	6.85%	
(D)	VALUE LINE HISTORIC DPS	8.00%	1.50%	1.50%	5.00%	0.50%	3.00%	4.50%	%00.9	1.00%	1.50%	3.25%	5.77%
	EPS	8.50%	2.00%	9.50%	7.50%	1.00%	8.00%	6.50%	13.00%	%00.6	4.00%	7.20%	
	BVPS	1.50%	4.00%	5.50%	9.50%	4.50%	2.00%	4.00%	6.00%	3.50%	4.50%	4.80%	
(0)	VALUE LINE PROJECTED  DPS	2.50%	1.50%	2.50%	5.50%	ı	5.50%	3.50%	7.00%	5.00%	3.00%	4.00%	4.38%
	EPS	3.50%	4.00%	3.50%	2.50%	2.50%	2.00%	2.50%	5.50%	4.50%	4.00%	4.35%	
(B)	ZACKS	4.70%	2.00%	3.00%	6.50%	4.20%	6.00%	7.00%	%09.6	7.00%	2.00%		5.80%
₹	(br)+(sv)	5.95%	4.42%	5.12%	5.68%	5.18%	4.95%	4.75%	7.88%	4.00%	4.38%		5.23%
	SYMBOL	AGL	ATO	97	NJR	GAS	NWN	₽NY	S	SWX	MGL		AVERAGES
	빌	-	7	က	4	c)	9	7	80	6	10	<del>-</del>	12

REFERENCES:
COLUMN (A): SCHEDULE WAR - 4, PAGE 1, COLUMN C
COLUMN (B): ZACKS INVESTMENT RESEARCH (www.zacks.com)

COLUMN (C): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 10/23/2009 (WATER COMPANIES) AND 09/11/2009 (NATURAL GAS LDC'S)
COLUMN (D): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 10/23/2009 (WATER COMPANIES) AND 09/11/2009 (NATURAL GAS LDC'S)
COLUMN (E): SIMPLE AVERAGE OF COLUMNS (B) THRU (D) LINES 1 THRU 3 (WATER) AND 1 THRU 10 (NATURAL GAS)
COLUMN (F): 5-YEAR ANNUAL GROWTH RATE CALCULATED WITH DATA COMPILED FROM VALUE LINE INVESTMENT SURVEY

- RATINGS & REPORTS DATED 10/23/2009 (WATER COMPANIES) AND 09/11/2009 (NATURAL GAS LDC's)

LITCHFIELD PARK SERVICE COMPANY TEST YEAR ENDED SEPTEMBER 30, 2008 CAPM COST OF EQUITY CAPITAL

DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104 SCHEDULE WAR - 7, PAGE 1 OF 2

# BASED ON A GEOMETRIC MEAN:

(B) EXPECTED	RETURN	5.82%	5.61%	7.08%	5.19%	5.92%	5.61%	5.19%	4.98%	5.19%	5.40%	4.98%	5.19%	5.19%	5.61%	5.19%	5.25%
	ŧŧ	II	11	П	H		IJ	н	н	11	11	П	II	п	1)	li	
	7	) ]	) ]	)	) ]		) ]	) ]	)	) ]		)	) ]	) ]	) ]	<u> </u>	
	۳	5.40% ) ]	5.40%	5.40%	5.40%		5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	
	$ \cdot $	•	•	1	•			•	•	•		1	•	•		•	
	Ē	9.60%	%09.6	%09.6	%09.6		%09.6	%09.6	%09.6	%09.6	%09.6	%09.6	%09.6	%09.6	9.60%	%09.6	
	$\neg$	~	$\overline{}$	$\overline{}$	$\smile$		_	$\overline{}$	$\overline{}$	$\smile$	$\smile$	_	$\overline{}$	$\smile$	$\smile$	_	
	×	×	×	×	×		×	×	×	×	×	×	×	×	×	×	_
€	2	0.80	0.75	1.10	0.65	0.83	0.75	0.65	09.0	0.65	0.70	09.0	0.65	0.65	0.75	0.65	0.67
	+	<u> </u>	+	+	<u> </u>	_	+	<u> </u>	<u> </u>	+	+	+	<u> </u>	<u> </u>	+	+	_
	ے	2.46%	2.46%	2.46%	2.46%	AGE	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	RAGE
	н	u	п	н	H	VER	a	H	П	п	п	11	п	П	H	п	AVE
	¥	×	×	¥	×	MPANY A	¥	¥	×	¥	*	¥	×	×	×	¥	AS LDC
STOCK	SYMBOL	AWR	CWT	SWWC	WTR	WATER COMPANY AVERAGE	AGL	АТО	FG	NJR	GAS	NWN	PNY	S	SWX	WGL	NATURAL GAS LDC AVERAGE
<u>u</u>	S S	-	7	т	4	ທ	g	7	æ	o	10	Ξ	12	13	4	15	16

# REFERENCES:

COLUMN (A): SHARPE LITNER CAPITAL ASSET PRICING MODEL ("CAPM") FORMULA

 $k = r_f + [R(r_m - r_f)]$ 

WHERE: k = THE EXPECTED RETURN ON A GIVEN SECURITY  $t_t$  = RATE OF RETURN ON A RISK FREE ASSET PROXY (a)

 $\Omega$  = THE BETA COEFFICIENT OF A GIVEN SECURITY  $r_{m}$  = PROXY FOR THE MARKET RATE OF RETURN (b)

COLUMN (B): EXPECTED RATE OF RETURN USING THE CAPM FORMULA

# NOTES

- (a) AN 8-WEEK AVERAGE OF THE YIELD ON A 5-YEAR U.S. TREASURY INSTRUMENT THAT APPEARED IN <u>VALUE LINE INVESTIMENT SURVE</u>Y'S "SELECTION & OPINIONS" PUBLICATION FROM 09/04/2009 THROUGH 10/23/2009 WAS USED AS A RISK FREE RATE OF RETURN.
- (b) THE RISK PREMIUM (RM RF) USED THE GEOMETRIC MEAN FOR S&P 500 TOTAL RETURNS OVER THE 1926 2008 PERIOD MINUS TOTAL RETURNS ON INTERMEDIATE TREASURIES DURING THE SAME PEI THE DATA WAS OBTAINED FROM MORNINGSTAR'S STOCKS, BONDS, BILLS AND INFLATION: 2009 YEARBOOK,

LITCHFIELD PARK SERVICE COMPANY TEST YEAR ENDED SEPTEMBER 39, 2008 CAPM COST OF EQUITY CAPITAL

DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104 SCHEDULE WAR - 7, PAGE 2 OF 2

# BASED ON AN ARITHMETIC MEAN:

(B) EXPECTED	RETURN	7.34%	7.03%	9.17%	6.42%	7.49%
	П	п	li	п	п	
	$\overline{}$	7		7		
	ے	2.60%	2.60%	5.60%	2.60%	
	- 1		•	ı	1	
	"L	11.70%	11.70%	11.70%	11.70%	
	4	$\smile$	$\smile$	$\smile$	$\overline{}$	
	×	×	×	×	×	
€	- B	0.80	0.75	1.10	0.65	0.83
	닉	_	-		_	ш
	+	+	+	+	+	
	+ 4	2.46%	2.46%	2.46%	2.46%	RAGE
	H	II	п	li	н	Ř
	×	¥	×	×	×	MPANY A
STOCK	SYMBOL	AWR	CWT	SWWC	WTR	WATER COMPANY AVERAGE
NE NE	9	-	Ø	က	4	ro.

6.51%								0.67			ERAGE	A VE	GAS LD(	NATURAL GAS LDC AVERAGE	16
6.42%	11	)	5.60%	•	11.70%	$\overline{}$	×	+ [ 0.65	_	+	2.46%	11	¥	WGL	15
7.03%	11		5.60%	•	11.70%	$\overline{}$	×	0.75	<del>-</del>	+	2.46%	н	¥	SWX	4
6.42%	и	) ]	5.60%		11.70%	$\overline{}$	×	0.65	+	+	2.46%	H	¥	S	13
6.42%	п	) ]	5.60%		11.70%	)	×	0.65	+	+	2.46%	н	×	PN≺	12
6.12%	11	) ]	5.60%		11.70%	$\overline{}$	×	09.0	+	+	2.46%	н	*	NWN	#
6.73%	u	) ]	5.60%	1	11.70%	$\smile$	×	0.70	<u>-</u>	+	2.46%	ĮĮ.	×	GAS	9
6.42%	11	) ]	5.60%	1	11.70%	$\sim$	×	0.65	+	+	2.46%	П	¥	NJR	တ
6.12%	Ш	) ]	5.60%	•	11.70%	-	×	0.60	+	+	2.46%	п	×	97	∞
6.42%	II	)	5.60%	,	11.70%	$\overline{}$	×	0.65	+	+	2.46%	11	¥	АТО	7
7.03%	ıı	$\overline{}$	2.60%	,	x ( 11.70%	<u> </u>	×	0.75	+	+	2.46%	11	×	AGL	9

REFERENCES: COLUMN (A): SHARPE LITNER CAPITAL ASSET PRICING MODEL ("CAPM") FORMULA

k = r; + [ß (r\_m - r,)]

WHERE: k = THE EXPECTED RETURN ON A GIVEN SECURITY  $t_{\rm f}$  = RATE OF RETURN ON A RISK FREE ASSET PROXY (a)

 $\delta$  = THE BETA COEFFICIENT OF A GIVEN SECURITY  $r_{m}$  = PROXY FOR THE MARKET RATE OF RETURN (b)

COLUMN (B): EXPECTED RATE OF RETURN USING THE CAPM FORMULA

# NOTES

- (a) AN 8-WEEK AVERAGE OF THE YIELD ON A 5-YEAR U.S. TREASURY INSTRUMENT THAT APPEARED IN VALUE LINE INVESTMENT SURVEYS "SELECTION & OPINIONS" PUBLICATION FROM 09/04/2009 THROUGH 10/23/2009 WAS USED AS A RISK FREE RATE OF RETURN.
- (b) THE RISK PREMIUM (RM- RF) USED THE GEOMETRIC MEAN FOR S&P 500 TOTAL RETURNS OVER THE 1926 2008 PERIOD MINUS TOTAL RETURNS ON INTERMEDIATE TREASURIES DURING THE SAME PEF THE DATA WAS OBTAINED FROM MORNINGSTAR'S STOCKS, BONDS, BILLS AND INFLATION: 2009 YEARBOOK.

# LITCHFIELD PARK SERVICE COMPANY TEST YEAR ENDED SEPTEMBER 30, 2008 ECONOMIC INDICATORS - 1990 TO PRESENT

DOCKET NO. SW-01428A-09-0103 DOCKET NO. W-01427A-09-0104
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(I) Baa-RATED UTIL. BOND YIELD	10.06%	9.55%	8.86%	7.91%	8.63%	8.29%	8.17%	8.12%	7.27%	7.88%	8.36%	8.02%	7.98%	6.64%	6.20%	2.78%	6.30%	6.24%	6.64%	6.22%
(H) A-RATED UTIL. BOND YIELD	%98'6	8:36%	8.69%	7.59%	8.31%	7.89%	7.75%	7.60%	7.04%	7.62%	8.24%	7.59%	7.41%	6.18%	5.77%	5.38%	5.94%	6.07%	6.34%	5.65%
(G) 30-YR T-BONDS	7.49%	5.38%	3.43%	3.00%	4.25%	5.49%	5.01%	2.06%	4.78%	4.64%	5.82%	5.95%	5.38%	4.92%	5.03%	4.57%	4.91%	4.84%	4.28%	4.26%
(F) 91-DAY T-BILLS	7.50%	5.38%	3.43%	3.00%	4.25%	5.49%	5.01%	2.06%	4.78%	4.64%	5.82%	3.40%	1.61%	1.01%	1.37%	3.15%	4.73%	4.36%	1.37%	7.00%
(E) FED. FUNDS RATE	8.10%	2.69%	3.52%	3.02%	4.21%	5.83%	5.30%	5.46%	5.35%	4.97%	6.24%	3.88%	1.67%	1.13%	1.35%	3.22%	4.97%	5.02%	1.92%	0.50% 0.00% - 0.25%
(D) FED. DISC. RATE	6.98%	5.45%	3.25%	3.00%	3.60%	5.21%	5.02%	2.00%	4.92%	4.62%	5.73%	3.41%	1.17%	2.03%	2.34%	4.19%	2.96%	5.86%	2.39%	0.50%
(C) PRIME RATE	10.01%	8.46%	6.25%	6.00%	7.14%	8.83%	8.27%	8.44%	8.35%	7.99%	9.23%	6.92%	4.67%	4.12%	4.34%	6.16%	7.97%	8.05%	2.09%	3.25%
(B) CHANGE IN GDP (1996 \$)	1.90%	-0.20%	3.30%	2.70%	4.00%	2.50%	3.70%	4.50%	4.20%	4.50%	3.70%	0.80%	1.60%	2.50%	3.60%	2.90%	2.80%	2.00%	1.30%	-1.00%
(A) CHANGE IN CPI	5.39%	4.25%	3.03%	2.96%	2.61%	2.81%	2.93%	2.34%	1.55%	2.19%	3.38%	2.83%	1.59%	2.27%	2.68%	3.39%	3.24%	2.85%	3.58%	-1.40%
YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	CURRENT
	-	2	က	4	Ŋ	9	7	∞	6	10	7	12	13	4	15	16	17	18	19	20

REFERENCES:
COLUMN (A): 1990 - CURRENT, U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS WEB SITE
COLUMN (B): 1990 - CURRENT, U.S. DEPARTMENT OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS WEB SITE
COLUMN (C) THROUGH (G): 1990 - 2003, FEDERAL RESERVE BANK OF ST. LOUIS WEB SITE
COLUMN (C) THROUGH (D): CURRENT, THE VALUE LINE INVESTMENT SURVEY, DATED 10/23/2009
COLUMN (F) THROUGH (I): 1990 - 2000, MOODY'S PUBLIC UTILITY REPORTS
COLUMN (H) THROUGH (I): 2001, MERGENT 2002 PUBLIC UTILITY MANUAL
COLUMN (H) THROUGH (I): 2003 MERGENT NEWS REPORTS

# AVERAGE CAPITAL STRUCTURES OF SAMPLE WATER COMPANIES

LINE NO.		7	AWR	PCT.	CWT	PCT.	SWWC	PCT.	WTR	PCT.	WATER C	ÖMF	PCT.
τ (	DEBT	↔	266.5	46.2% \$ 287.5	287.5	41.6%	9.061	62.6%	\$ 1,248.1	54.1%	\$ 498.2		51.4%
ი ი	PREFERRED STOCK		0.0	%0:0 0	0.0	0.0%	0.5	0.2%	0.0	%0:0	0	1.	%0.0
4 70 (	COMMON EQUITY		310.5	53.8%	402.9	58.4%	113.3	37.2%	37.2% 1,058.4	45.9%	471.3	1	48.6%
9 ~	TOTALS	↔	577.0	577.0 100% \$ 690.4 100% \$ 304.4 100% \$ 2,306.5 100% \$ 969.6	690.4	100%	304.4	100%	\$ 2,306.5	100%	596 \$		100%

# AVERAGE CAPITAL STRUCTURES OF SAMPLE NATURAL GAS COMPANIES

ı	PCT.	31.5%	0.0%	68.4%	100%	PCT.	38.5%	1.8%	59.7%	100%						
	GAS	448.0	9.0	973.1	1,421.7	WGL	603.7	28.2	935.1	\$1,567.0						
	PCI.	38.5%	%0.0	61.5%	100%	PCT.	51.0% \$	4.3%	44.7%	100%						
! :	Z Z	\$ 455.1	0.0	727.0	\$ 1,182.1	SWX	\$ 1,185.5	100.0	1,037.8	\$ 2,323.3						
: !	PCT.	44.4%	0.1%	55.5%	100% \$ 1,182.1	PCT.	39.2%	0.0%	%8.09	100%	, TDC	PCT.	47.8%	0.5%	51.7%	100%
:	9	\$ 389.2	0.5	486.5	\$ 876.2	SJI	\$ 332.8	0.0	515.3	\$ 848.1	WATER & LDC	AVERAGE	\$ 674.9	6.5	730.4	\$ 1,411.7
	PCT.	20.8%	%0.0	49.2%	100%	PCT.	47.2% \$	0.0%	52.8%	100%	i)		15.86		٠. '	왕
!	ATO	\$ 2,119.8	0.0	2,052.5	100% \$ 4,172.3	₽N≺	\$ 794.3	0.0	887.2	\$ 1,681.5						
# !		50.3%	0.0%	49.7%	100%	PCT.	44.9%	0.0%	55.1%	100%	SLDC	PCT.	45.9%	0.7%	53.4%	100%
į	AGL	1,675.0	0.0	1,652.0	3,327.0	NWN	512.0	0.0	628.4	1,140.4	NATURAL GAS LDC	AVERAGE	851.5	12.9	989.5	1,854.0
	181.75 <u>6</u>	↔	113.53		₩.	s diese -	<b>↔</b>	549 <sup>8</sup>	ayaa	₩		< <	↔	30° 2° °	1	↔
		DEBT	PREFERRED STOCK	COMMON EQUITY	TOTALS		DEBT	PREFERRED STOCK	COMMON EQUITY	TOTALS			DEBT	PREFERRED STOCK	COMMON EQUITY	TOTALS
NO NO	۰ -	v ∞ <		0 ~ 0	∞ o 5	<del>+</del> 2 4	5 <del>4</del> 7	င် 6 (	7 8	2 20 4	22	24	5 8 2	788	8 8	32

REFERENCE: MOST RECENT SEC 10-K FILINGS OR ANNUAL REPORTS

# LITCHFIELD PARK SERVICE COMPANY

DOCKET NO. SW-01428A-09-0103

DOCKET NO. W-01427A-09-0104

OF
MATTHEW ROWELL

ON BEHALF OF
THE
RESIDENTIAL UTILITY CONSUMER OFFICE

**NOVEMBER 4, 2009** 

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# 1 TABLE OF CONTENTS 2 3 Introduction 1 4 II. Background 2 5 III. Design and Construction Problems at the PVWRF 2 IV. Affiliate Operating Expenses allocated to LPSCO 6 6 7 APPENDIX 1 – Qualifications of Matthew Rowell

# 1 I. Introduction

- 2 Q. Please state your name position and employer address.
  - A. Matthew J. Rowell
- 4 Member
- 5 Desert Mountain Analytical Services, PLLC ("DMAS")
- 6 PO Box 51628
- 7 Phoenix, AZ 85076

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- Q. Please state your background and qualifications in the field of utility regulation.
- 11 A. Appendix 1, attached to this testimony lists my educational qualifications and the utility matters in which I have participated.

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- Q. Please state the purpose of your testimony.
- A. My testimony discusses the issue of design and construction problems at the Palm Valley Water Reclamation Facility ("PVWRF") and the allocation of affiliate operating expenses to Litchfield Park Service Company ("LPSCO" or "the Company") by its various affiliate entities. The issues of revenue requirement, rate base, plant and expense adjustments, and rate design are discussed in the Direct Testimony of Sonn S. Rowell (also of DMAS.) Cost of capital and issues related to the expansion of the PVWRF are discussed in the Direct Testimony of RUCO witness William Rigsby.

# II. Background

- Q. Please describe your work effort on this project.
- A. I obtained and reviewed data and performed analytical procedures (including an audit of underlying source data) necessary to understand the Company's filing as it relates to the rate base, operating income and revenue requirements. My recommendations are based on these analyses. I relied on the information contained in the Company's rate case application, (testimony and schedules) and responses to RUCO and Commission Staff data requests.
- Q. What issues will you address in this testimony?
- A I will address RUCO's recommended adjustments based primarily on an audit of underlying source data. I present RUCO's recommended rate base, revenue requirement and rate design. The issue of affiliate expenses and upgrades to the Palm Valley Water Reclamation Facility ("PVWRF") are addressed in the testimony of RUCO witness Matthew Rowell (also of DMAS.) Cost of capital and issues related to the expansion of the PVWRF are discussed in the testimony of RUCO witness William Rigsby.

# III. Design and Construction Problems at the PVWRF

- Q. Please discuss LPSCO's wastewater plant additions since the last rate case.
- A. The last rate case used the calendar year 2000 as the test year. Since that time, plant additions have been substantial. Table one shows plant additions

by year from 2001 to the end of the current rate case test year as submitted by the Company.

Table 1. LPSCO Waste Water Plant Additions (adjusted) per LPSCO Schedule B2

Year	Add/(ret)
2001	\$2,216,710
2002	\$14,910,039
2003	\$144,272
2004	\$6,696,665
2005	\$5,721,506
2006	\$3,111,106
2007	\$2,285,823
2008 (Through Sep)	\$12,897,735

Q.

Reclamation Facility ("PVWRF") going into service. The PVWRF is a waste water processing plant that went into service with an average capacity of 4.1 mgd.

The \$14.9 million addition in 2002 results from the Palm Valley Water

Has LPSCO needed to expand the capacity of the PVWRF since 2002 due to customer growth?

A. According to the Company, no. The initial 4.1 mgd average capacity of the PVWRF has been and is currently sufficient to serve all of LPSCO's customers. Additionally, LPSCO indicated that they have no plans to begin construction necessary to increase the capacity of the PVWRF until late 2010 at the earliest (Response to RUCO Data Request MJR 2.9.)

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- Q. What accounts for the substantial plant additions made during the test year
  - portion of 2008?
- Α. LPSCO indicates that a large investment in plant was necessary to remedy
  - deficiencies at the PVWRF. In his Direct Testimony, LPSCO witness Great
    - Sorensen states: "...in the summer of 2007, the plant had two spill events that
    - confirmed that the plant, as originally designed and constructed by our
    - predecessor owners, was lacking certain redundancy capabilities and needed
    - some upgrades to achieve an acceptable level of reliability." (Emphasis
  - added.) Additionally, in response to RUCO data request MJR 2.14 the
  - Company provided excerpts from a report developed by McBride Engineering
- Solutions, Inc. ("MES") that document several design problems at the PVWRF
- that resulted in excessive odors, insufficient reliability and a lack of
  - redundancy capability. (The excerpts from the MES report were provided
    - pursuant to a confidentiality agreement so we have not provided direct quotes
    - from the report.)
  - Q. So as originally designed and constructed the PVWRF had significant
    - problems?
  - Α. Yes. The information provided by LPSCO indicates that there were
- 20 significant design problems at the PVWRF. Correcting these problems
- necessitated significant upgrades. The additional plant associated with those
- upgrades was put into service during the test year.

- Q. Do you believe it is fair that LPSCO customers should bear the full cost of the upgrades necessitated by the PVWRF's design problems?

A. No. Utilities have an obligation to design and build plant that meets acceptable levels of reliability. It is inherently unfair to saddle the customers with the excess and duplicative costs that result when utilities fail in that obligation.

Q. What do you recommend regarding LPSCO's 2008 waste water plant additions?

A. We believe the costs of the PVWRF upgrades necessitated by the PVWRF's design problems should be shared between the shareholders and the customers. At page 7 of his Direct Testimony Mr. Sorenesen states that the Company spent \$7 million on improvements to the PVWRF to correct the deficiencies resulting from the plant's design problems. We propose that the costs of these improvements be split 50/50 between the ratepayers and the shareholders. This results in a disallowance of \$3.5 million of test year plant additions.

Q. The PVWRF was originally built by LPSCO's former owners not its current owner (Algonquin.) Does this fact affect RUCO's recommendation that a portion of test year plant additions be disallowed?

A. No. Prior to making a purchase as substantial as LPSCO, sound business practices would require a thorough review of LPSCO's facilities. Design

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problems identified at that stage would have provided the purchaser with significant leverage in price negotiations.

Additionally, allowing for full recovery of the PVWRF redesign costs based on the fact that the facility changed hands would send the wrong signal to the industry. Companies looking to purchase utilities in Arizona would have less incentive to do proper due diligence if they know that the costs of fixing any existing problems could be imposed on the ratepayers. Similarly, if utilities that are building plant know that any problems with the plant can be dispensed with through a sale to another entity their incentive to build the plant properly in the first place will be diminished.

### IV. Affiliate Operating Expenses allocated to LPSCO

- Q. Have you examined the method the Company uses to allocate affiliate costs to LPSCO's water and sewer divisions?
- Α. Yes. The Company has indicated the following: "The new method of allocation is to charge all direct operations labor costs related to LPSCO via timesheets. All customer service and financial related costs are allocated based on customer counts to all AWS-operated utilities, and all administration costs are allocated based on a 4 factor formula to all Algonquin-owned This allocation is based on a weighted average of rate base, utilities. customer counts, wages, and operating expenses for all our utilities. Engineering services have remained allocating their time via the job costing

Direct Testimony Matthew Rowell Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104 1 timesheet process but have moved from market chargeable rates to cost 2 recovery rates".1 3 4 Q. Has the Company used this method of allocation in the past? 5 A. No. This is a new method being used in this and other current Algonquin rate 6 cases. 7 8 Q. What is the effect of this new allocation method on LPSCO? Α. In response to RUCO data request MJR 3.3(b) the Company provided a comparison of its old and new allocation methods that indicated that the new allocation method allocates \$250,577 less to LPSCO water and \$505,816 more to LPSCO sewer relative to their previous method of allocating affiliate costs. Q. Were these changes the result of the reallocation only? Α. No. The Company's response to MJR 3.3(b) indicates that in addition to reallocating the affiliate costs, \$136,903 in additional affiliate costs were allocated to the various Algonquin owned water and waste water companies under the new allocation method.

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<sup>&</sup>lt;sup>1</sup> Response to RUCO data request MJR 2.4

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- 1 Q. What is the source of this \$136,903 increase in allocated costs?
- A. I have been unable to determine the source of this \$136,903 increase in allocated costs.

Q. Do you know how much was allocated to LPSCO in the test year based on LPSCO's new allocation method?

A. Table 2 below shows the amount allocated to LPSCO under the new allocation method. This information was provided by LPSCO in response to RUCO data request MJR 3.3(b). The Company provided the following numbers:

Table 2. LPSCO Affiliate Allocations

•	Allocated to LPSCO Water	Allocated to LPSCO Sewer	Total	Allocation Method
Ops Costs	806,047	924,018	1,730,065	Timesheets
Act/Billing	430,806	477,294	908,100	Customer Count
Overhead Costs	705,667	691,664	1,397,331	4 – factor
Total	1,942,520	2,092,976	4,035,497	

- Q. Were you able to reconcile the allocated amounts as described in response to MJR 3.3(b) with the Company's rate case application?
- A. The Company has indicated that the amounts allocated by the above described method are booked to expense accounts 636 Contractual Services

 Other and 736 Contractual Services – Other for the water and sewer divisions, respectively.

The Company did not actually use the above described allocation process to determine and record transactions in these accounts through the test year. Rather, for purposes of the rate case filing, the Company's expenses were trued up to conform with the allocation method by Mr. Bourassa's adjustment(s) number 11 (Mr. Bourassa makes separate adjustments no. 11 for the water and for the waste water divisions.)

Initially, I could not reconcile the affiliate costs contained in accounts 636 and 736 with the amounts provided in response to RUCO Data Request MJR 3.3(b.) However, reviewing LPSCO's response to Staff Data Request JMM 5.3 revealed that the allocation method described in its response to MJR 3.3(b) (and summarized in Table 2 above) only pertained to allocations from Algonquin Water Services ("AWS"), not to amounts allocated from Algonquin Power Trust ("APT".) Based on the Company's response to Staff Data Request JMM 5.3 and adjustment(s) number 11 made by Company witness Bourassa, the allocations from AWS contained in accounts 636 and 736 do reconcile with the above described allocation method.

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- What sort of transactions has the Company booked to accounts 636 and Q. 736?
- In response to Staff data requests JMM 1.42 and 1.67 the Company provided Α. back-up detailing each transaction booked to these accounts. For purposes of responding to JMM 1.42 and 1.67 the Company broke each of the accounts into four broad categories. Table 3 below summarizes the content of accounts 636 and 736 as provided in the rate case application.

Table 3 Contractual Services - Other

	Water (636)	Sewer (736)	Total
Central Office Costs - Algonquin Power	(030)	(130)	
Trust (APT)			
Management Fees	273,956	182,637	456,593
Accounting fees and costs	2,689	2,747	5,436
HR costs and fees	12,927	5,276	18,203
IT costs	990	427	1,417
General OPS	1,146	764	1,910
Total			
	291,708	191,850	483,558
Contract Services - Algonquin Water	-		
Services (AWS)			
Water/Waste Fee	559,787	538,599	1,098,385
Operating Costs	861,949	613,862	1,475,811
OPS fee	463,158	333,776	796,933
Overhead	85,521	57,014	142,535
To amortize arsenic media proj	8,025		8,025
Accounting Fee	56,843	52,416	109,259
Other (credits)	(58,055)	(100,059)	158,114)
ACC Fee	53,588	35,725	89,313
8600-010008-act	64,764	62,811	127,575
Recon fees to 4 factor	(575,400)	(383,600)	(959,001)
reclassed to wtr ops fee		50,030	50,030
Total			
	1,520,179	1,260,574	2,780,753
Admin Allocation AWS			

Recon fees to 4 factor	728,574	485,716	1,214,290
Contractual Services Other			
Services provided by outside (non-affiliate) vendors	148,748	431,175	579,923
Grand Total	2,689,209	2,369,315	5.058.525

 Q. Are there issues with the costs allocated to LPSCO by AWS?

A. Yes. In response to JMM 5.3 the Company provided the operating costs that were allocated to LPSCO's water and sewer divisions by the 4 factor method. These numbers are close to but do not match the operating costs allocated via the 4 factor method as shown in the Company's response to MJR 3.3(b).

Additionally, the invoices provided to support the AWS allocations (provided in response to Staff data requests JMM 1.42 and 1.67) essentially contain no detail. Thus, it is impossible to audit the transactions between AWS and LPSCO based on those invoices. The same is true concerning the invoices between APT and LPSCO provided in response to Staff's 5<sup>th</sup> set of data requests.

- Q. What do you recommend regarding the costs allocated to LPSCO by Algonquin Water Services?
- A. The lack of backup for these costs could support a recommendation that all of these costs be disallowed. However, AWS does actually provide services to

LPSCO that are necessary for the provision of utility service. Also, the amounts allocated by AWS (after RUCO's adjustments) when taken on a percustomer basis are not out of line with what is typically charged by management companies to water utilities. Because of this we recommend that these costs be allowed, with one exception. The one exception is the allocations labeled as "Recon fees to 4 factor." The Company has provided no explanation for what these allocations are, they do not appear to be necessary for the provision of utility services, and they cannot be reconciled with the Company's description of how their 4 factor allocation method works. Therefore we recommend disallowance of the allocations labeled "Recon fees to 4 factor" which net to \$153,174 for LPSCO Water and \$102,116 for LPSCO Sewer.

- Q. Do you have concerns with the Central Office Costs charged to LPSCO by Algonquin Power Trust?
- A. Yes. In its rate case application and in response to several data requests the Company described the allocation of affiliate costs by indicating that operating costs are billed out by time sheets. Accounting and billing costs are allocated based on customer counts and overhead costs are allocated by the 4-factor method. No mention was made of the additional layer of allocated costs from Algonquin Power Trust. It was not until Staff specifically asked about these costs in its Data Request JMM 5.3 that the Company provided any information about this additional layer of affiliate costs allocated to LPSCO.

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The Central Office Costs charged to LPSCO by Algonquin Power Trust are of concern for several reasons:

- In response to Staff data request JMM 5.3 the Company indicated that \$250,979 and \$267,462 were allocated to LPSCO's water and sewer divisions respectively by Algonquin Power Trust. However, \$291,708 and \$191,850 were actually allocated to LPSCO's water and sewer divisions, respectively, by Algonquin Power Trust.
- In January of 2008 (during the test year) the management fees charged to LPSCO by Algonquin Power Trust increased from \$13,200 to \$26,040 per month for LPSCO water and \$8,800 to \$17,360 per month for LPSCO sewer. The Company has provided no explanation for this increase in management fees from Algonquin Power Trust.
- The invoices provided by Algonquin Power Trust essentially contain no detail.
   Thus, it is impossible to audit the transactions between Algonquin Power Trust and LPSCO based on those invoices.
- Most importantly, in response to JMM 5.3 the Company provided explanations for the various categories of costs allocated to LPSCO by Algonquin Power Trust. These explanations were insufficient and did not establish that the "services" provided by Algonquin Power Trust are necessary for the provision of water and waste water service.
  - For all of these reasons we recommend that the Central Office Costs allocated to LPSCO by Algonquin Power Trust (\$291,708 for water and \$191,850 for sewer) be disallowed.
- Q. Are there other issues regarding LPSCO's affiliate relations that are concerning?
- A. There are several other issues that if taken alone would not be extremely concerning but taken together and in light of the above discussion raise to the

level of concern. I believe the Commission should be aware of these issues so they are listed here:

- No manual or contracts: Algonquin does not have and does not plan to produce a manual or other document that details the cost allocation process. (RUCO DR MJR 3.8) Additionally, there are no contracts between LPSCO and any of the Algonquin affiliates. (RUCO DR MJR 3.2) Thus, it appears that Algonquin has no safeguards that would prevent the allocation process from taking place on an ad hoc basis.
- Organizational Chart: The organizational chart for the Algonquin organization provided in response to JMM 1.17 is inaccurate and incomplete. For example, APT (the entity that charged LPSCO \$483,558 during the test year) does not appear on the organizational chart and AWS and Algonquin Power Systems are portrayed as independent entities.
- Affiliates other than water and sewer: The allocation methods described above allocate parent level costs across Algonquin's water and waste water utilities (located primarily in Arizona, Missouri and Texas.) In addition, to these utilities several electric generation companies fall under the Algonquin umbrella. It is not clear from any of the information provided by the Company (e.g. organizational charts) how these electric generation companies fit into the Algonquin corporate structure and how APT's costs are allocated between its water/waste water holdings and its electric generation holdings. Additionally, the rent invoices for APT provided in response to Staff Data Request JMM 5.5 indicates that an entity called Algonquin Power Property Limited Partnership is APT's lándlord (in Ontario.) Algonquin Power Property Limited Partnership is presumably another Algonquin affiliate; but it is not clear how it fits into the Algonquin corporate structure.
- Bank fees: The banking fees that AWS passes through to LPSCO contain several inappropriate charges (see the Direct Testimony of RUCO witness Sonn Rowell, Water Division Operating Income Adjustment No. 8 and Wastewater Division Operating Income Adjustment No. 9 for a discussion of this issue.)

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- Convoluted basic accounting system: The accounting system used to track day to day activity seems unnecessarily convoluted. For example, examination of Company provided invoices show that when an AWS employee makes a purchase at Lowe's for material necessary for repairs at LPSCO, that purchase is booked at the AWS level and then allocated down to LPSCO. Conceivably, purchases such as this could be initially booked directly to LPSCO which would eliminate several steps in the cost allocation process.
- Name Changes: AWS recently changed its name to Liberty Water. Several years ago the name was changed from New Spring Water to AWS. In spite of several years passing since the name New Spring Water was used officially it still shows up on documents produced in the test year.
- Q. Does your silence on any of the issues, matters or findings addressed in the testimony of any of the witnesses for LPSCO constitute your acceptance of their positions on such issues, matters or findings?
- A. No, it does not.

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- Q. Does this conclude your direct testimony on LPSCO?
- 22 A. Yes, it does.

# **Qualifications of Matthew Rowell**

## **Professional History**

## Desert Mountain Analytical Services, PLLC 2007 - Present

Member

Prepare testimony and analysis for utilities regarding regulatory issues. Most recently I prepared and sponsored testimony on behalf of Global Water regarding their multi-system rate case, Docket No. W-20446A-09-0080 and their Notice of Intent to Restructure, Docket No. W-20446A-08-0247.

# Arizona Corporation Commission 1996 to 2007

Chief Economist (July 2001 to February 2007)

Was responsible for supervising a staff of nine professionals who analyzed and produced testimony or staff reports on a wide variety of energy and telecommunications issues. Recent cases for which I provided testimony myself include:

APS Rate Case E-01345A-05-0816: Provided testimony on staff's position on APS' proposed Environmental Improvement Charge. I also acted as the overall case manager and was responsible for coordinating all of staff's testimony.

APS Application to acquire a power plant in the Yuma area E-01345A-06-0464: Provided testimony in support of APS' application. Interveners in this case raised a variety of complex issues.that needed to be addressed.

Southern California Edison's application to build a high voltage power line linking Arizona to Southern California L-00000A-06-0295-00130: Provided testimony detailing the potential economic effects of SCE's proposed power line.

Accipiter's complaint against Cox Communications regarding the Vistancia development T-03471A-05-0064: Provided written testimony regarding Accipiter's allegations concerning Cox's dealings with the developers of Vistancia.

Significant past responsibilities included managing staff's case (including negotiating a settlement agreement) in APS' 2003 rate case, negotiating the settlement between staff and Qwest regarding three enforcement dockets, supervising the "independent monitor" of APS' and Tucson Electric Power's (TEP) wholesale power procurement, providing testimony on Qwest's noncompliance with the Commission's wholesale rate order, managing staff's case regarding Qwest's alleged noncompliance with the Federal Telecommunications Act, and acting as staff's lead witness in the Commission's reevaluation of the electric competition rules which resulted in the suspension of APS' and TEP's obligation to divest their generation assets.

Economist (October 1996 to July 2001)

Significant responsibilities included supervising the testing of Qwest's operational support systems (OSS), analyzing Qwest's compliance with Section 271 of the Federal Telecommunications Act, providing testimony on the geographic de-averaging of Qwest's Unbundled Network Element prices, and acting as Chairman of the Commission's Water Task Force.

# Arizona Department of Transportation, Phoenix, AZ 1996, 1998, and 1999

Research Analyst

Authored research reports on the costs and benefits of traffic demand management policies, the relative merit of various highway-financing techniques, and air pollution reduction technologies.

# Arizona State University, Tempe, AZ 1992-1996.

Lecturer-economics 1994-1996

Responsible for teaching microeconomics classes requiring the creation of lectures and tests as well as full responsibility for assigning grades.

Teaching assistant 1992-1994

Responsible for assisting professors in administering tests, grading, and teaching.

## Education

# Master of Science and ABD Economics, 1995, Arizona State University.

I have successfully completed all course work and exams necessary for a Ph.D. Course work included an emphasis in industrial organization and extensive experience with statistical analysis, public sector economics, and financial economics.

Bachelor of Science Economics, 1992, Florida State University.

Minors: Philosophy, Statistics

# LITCHFIELD PARK SERVICE COMPANY

DOCKET NO. SW-01428A-09-0103

DOCKET NO. W-01427A-09-0104

**DIRECT TESTIMONY** 

OF

SONN S. ROWELL, CPA

**ON BEHALF OF** 

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

**NOVEMBER 4, 2009** 

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Direct Testimony of Sonn S. Rowell Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104 1. Introduction Please state your name position and employer address. Q. Sonn S. Rowell, Member, Desert Mountain Analytical Services, PLLC A. ("DMAS") PO Box 51628, Phoenix, AZ 85076 Please state your background and qualifications in the field of utility Q. regulation. Α. Appendix 1, attached to this testimony lists my educational qualifications and the utility matters I have participated in. Q. Please state the purpose of your testimony. My testimony describes RUCO's recommended adjustments made to Α. Litchfield Park Service Company's ("LPSCO" or the "Company") pending water and wastewater rate case. This testimony presents RUCO's recommended rate base, revenue requirement and rate design. II. Background Q. Please describe your work effort on this project. A. I obtained and reviewed data and performed analytical procedures (including

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an audit of underlying source data) necessary to understand the Company's

filing as it relates to the rate base, operating income and revenue

requirements. My recommendations are based on these analyses. I relied

on the information contained in the Company's rate case application, (testimony and schedules) and responses to RUCO and Commission Staff data requests.

Q. What issues will you address in this testimony?

A I will address RUCO's recommended adjustments based primarily on an audit of underlying source data. I present RUCO's recommended rate base, revenue requirement and rate design. The issues of affiliate expenses and upgrades to the Palm Valley Water Reclamation Facility ("PVWRF") are addressed in the Direct Testimony of Matthew Rowell (also of DMAS.) Cost of capital and issues related to the expansion of the PVWRF are discussed in the Direct Testimony of RUCO witness William Rigsby.

Q. Please identify the exhibits you are sponsoring.

A. Exhibit 1 contains schedules detailing the recommended adjustments to expenses, plant in service and rate base of LPSCO's water division. It also shows RUCO's recommended revenue requirement and rate design for LPSCO's water division.

Exhibit 2 contains the same information for LPSCO's wastewater division.

#### III. Water Division

- 1. Revenue Requirement (Water) Schedule 1
- 3 Q. What is RUCO's proposed revenue requirement for LPSCO's water division?
  - A. RUCO is recommending a revenue requirement of \$10,923,684 for LPSCO's water division. This represents a 58.8% increase above RUCO's adjusted test year water revenues. This compares with LPSCO's request for a revenue requirement of \$13,984,331 for its water division, which would be a 116% increase above LPSCO's adjusted test year water revenues.

#### 2. Rate Base Adjustments (Water) Schedule 2

- Q. Please explain Rate Base Adjustment No. 1.
- A. This adjustment decreases accumulated depreciation by \$189,493 to account for the difference between RUCO's recommended accumulated depreciation balance and the Company's accumulated depreciation balance as filed. It also reduces Utility Plant in Service ("UPIS") by \$841,129 to account for RUCO's recommended reductions in Plant in Service.
- Q. Please explain Rate Base Adjustment No.2.
- A. This adjustment reduces rate base by \$48,150 to account for the 2% cap on the (amortized) debt issuance costs associated with LPSCO's IDA bonds.

- Q. Why did RUCO make an adjustment reducing the Company's Unamortized Debt Issuance Costs?
  - A. The Company has two outstanding Series of Industrial Development Authority (IDA) Water and Sewer Revenue Bonds, the first issued in 1999 in the aggregate face amount of \$5,335,000, and the second, in 2001, in the aggregate face amount of \$7,500,000. Pursuant to the Loan Agreement for each IDA Bond Series, Article II, Section 2.2 (w) limits the debt issuance costs financed by the Project Bonds to two percent (2%) of the aggregate face amount of the Project Bonds. Accordingly, Adjustment No. 2 reduces the Company's allowable debt issuance cost to two percent of the aggregate face amount for both the 1999 and 2001 Series IDA Bonds, with the calculation of the unamortized portion of those costs, as of the Test Year ended September 30, 2008, determined by the number of months of amortization remaining before each respective IDA Bond Series matures.
- Q. What was the total amount of the adjustment made by RUCO to this deferred expense account?
- A. RUCO reduced the Company's Unamortized Debt Issuance Cost by a total of \$96,301. As filed, the Company reported a balance of \$268,542 in Unamortized Debt Issuance Costs, and as adjusted, RUCO determined the proper figure is \$172,242. The Company allocated its Unamortized Debt Issuance Costs equally between Operating Divisions, with both the Water and Wastewater Division reporting a deferred expense for this item of \$134,271

(\$268,542 / 2). As a consequence, Adjustment no. 2 reduces Unamortized Debt Issuance Costs for each Operating Division by \$48,150 (\$96,301 / 2).

Q. To the extent the Company may have incurred debt issuance costs in excess of two percent of the aggregate face amount of its IDA Series Bonds, why does RUCO feel it would be inappropriate to allow recovery of that additional expense in rates?

A. The IDA issuing authority limited debt issuance costs to 2% of the aggregate face value of the bond proceeds obtained. To the extent, the Company incurred debt issuance costs in excess of that 2% figure, LPSCO is unable to produce any documentation to that effect. RUCO Data Request MJR 2.24(a) asked the Company to provide supporting documentation for all debt issuance costs incurred for the 1999 and 2001 IDA Series Bonds. In response LPSCO indicted it was unable to find the information requested, citing the fact that Algonquin bought LPSCO in 2003 after the bonds had been issued.

Q. Please Explain Rate Base Adjustment No. 3.

 A. This adjustment reduces rate base by \$8,256 that was essentially double-counted under the Company's proposed recovery of the deferred regulatory asset associated with the TCE plume.

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#### Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104 1 3. Adjustments to Test Year Plant (Water) Schedule 3 2 Q. Please explain the test year plant adjustments. 3 Plant Adjustment No. 1 replaces \$21,100 in organization costs that were Α. 4 allowed per LPSCO's last rate case decision. Plant Adjustment Nos. 2 through 7 replace affiliate profit that the Company 5 had removed from various plant accounts. This affiliate profit was originally 6 7 included in capitalized affiliate labor costs included in water plant by the 8 Company in the years since the last rate case. We are replacing this profit 9 because we are removing almost all of the capitalized affiliate labor costs 10 included in water plant by the Company due to lack of support. 11 Plant Adjustment Nos. 8 through 14 remove almost all of the capitalized 12 affiliate labor. With the exception of accounts 304 and 333 for 2008 the 13 support associated with the capitalized affiliate labor was inadequate. This issue is discussed further in Section III below. 14 15

Plant Adjustment Nos. 15 through 22 reduce plant to account for various invoices that either could not be found or were associated with repair work.

Plant Adjustment 23 capitalizes two items that were inappropriately expensed.

4. Adjustments to Operating Income (Water) Schedule 4

- Q. How are the Operating Income Adjustments organized?
- A. The Operating Income Adjustments are organized by account.

Direct Testimony of Sonn S. Rowell Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104 Q. Please explain the Operating Income Adjustments. Operating Income Adjustment No. 1 to Metered Water Revenues. LPSCO had sought an adjustment to its test year revenue of \$403,707 based on the premise that it expected to lose the City of Goodyear as a bulk water customer. The loss of the City of Goodyear as a bulk water customer is not a known and measurable event. Furthermore, it is now fully 13 months after the end of the test year and the City of Goodyear is still a bulk water customer of LPSCO. Therefore, Operating Income Adjustment No. 1 reverses the Company's adjustment that removed \$403,707 from test year revenue. Operating Income Adjustment No. 2 to Fuel for Power Production. RUCO's Operating Income Adjustment No. 2 removes nonrecurring expenses that were inappropriately included in LPSCO's test year expenses. Operating Income Adjustment No. 3 to Chemicals. This adjustment removes \$2,309 from test year expenses because they were incurred outside of the test year.

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1 Operating Income Adjustment No. 4 Outside Services - Other. RUCO's Operating Income Adjustment No. 4a removes \$9,714 in capital 2 3 items that were inappropriately booked as expenses and removes \$19,912 in 4 expenses that are nonrecurring. 5 6 Operating Income Adjustment No. 4b removes \$291,708 in costs allocated to 7 LPSCO by Algonquin Power Trust (This adjustment is discussed further in the 8 Direct Testimony of Matthew Rowell.) 10 Operating Income Adjustment No. 4c removes various unnecessary and 11 inappropriate expenses. 12 Adjustment 4d removes \$153,174, net expenses associated with "Recon 13 14 Fees to 4 Factor" due to lack of support for these expenses. (This adjustment 15 is discussed further in the Direct Testimony of Matthew Rowell.) 16 17 Operating Income Adjustment No. 5 to Water Testing. 18 This adjustment removes \$590, a nonrecurring expense. 19 Operating Income Adjustment No. 6 to Transportation Expenses. 20 21 This adjustment removes \$24,302 of expenses that are unnecessary. Adjustment No. 6 also removes \$422 of expenses incurred outside of the test 22 23

year are removed and \$37 in non-recurring expenses are removed.

#### Operating Income Adjustment No. 8 to Miscellaneous Expenses.

This adjustment removes \$338 in nonrecurring expenses. Also, \$21,689 in unnecessary/inappropriate expenses are removed. These expenses mainly pertain to credit card merchant fees, which are unnecessary and inappropriate for two reasons: (1) To our knowledge LPSCO does not accept credit card payments for its water bills. (2) Allowing credit card merchant fees to be expensed requires customers who do not pay with a credit card to subsidize customers who do. When the Company absorbs the merchant fee it is essentially giving a discount to the customer who pays with the credit card. If the fees are allowed in test year expenses, that discount is funded by all customers regardless of whether they use credit cards or not.

#### Operating Income Adjustment No. 9 to Depreciation Expense.

Adjustment 9a reduced depreciation expense by \$43,211 because of the various RUCO plant adjustments. Adjustment 9b reduces the depreciation expense to recognize the 2% cap on the (amortized) debt issuance costs associated with LPSCO's IDA bonds (this issue is discussed in detail above in Section 2 Rate Base Adjustment 2.)

#### Operating Income Adjustment No. 10 to Property Tax Expense.

This adjustment reflects a reduction of \$38,253 for the Company's property tax and is based on the use of the Arizona Department of Revenue formula.

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Operating Income Adjustment No. 11 to Income Tax Expense.

2 3 This adjustment develops the income tax expense used in determination of the revenue requirement.

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#### IV. **Wastewater Division**

division?

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#### 1. Revenue Requirement (Wastewater) Schedule 1

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What is RUCO's proposed revenue requirement for LPSCO's wastewater Q.

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RUCO is recommending a revenue requirement of \$8,169,592 for LPSCO's A.

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wastewater division. This represents a 28.47% increase above RUCO's

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adjusted test year water revenues. This compares with LPSCO's request for

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a revenue requirement of \$11,347,975 for its water division which would be a

78.53% increase above LPSCO's adjusted test year water revenues.

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#### Rate Base Adjustments (Wastewater) Schedule 2 2.

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Q. Please explain Rate Base Adjustment No. 1.

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This adjustment decreases accumulated depreciation by \$291,308 to account

for the difference between RUCO's recommended accumulated depreciation

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balance and the Company's accumulated depreciation balance as filed. It

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also reduces UPIS by \$6,693,440 to account for RUCO's recommended

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reductions in Plant in Service.

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- 1 Q. Please explain Rate Base Adjustment No.2.
  - A. This adjustment reduces rate base by \$48,150 to account for the 2% cap on the (amortized) debt issuance costs associated with LPSCO's IDA bonds.

    See the above discussion regarding Rate Base Adjustment 2 (Section I.2) for the water division for more information on this topic.
  - Q. Please Explain Rate Base Adjustment No. 3.
  - A. This adjustment increases the Company's CIAC balance by \$597,670 to account for CIAC that was not included in the Company's rate case application. This results in a reduction in rate base of \$597,670.

#### 3. Adjustments to Test Year Plant (Wastewater) Schedule 3

- Q. Please explain the test year plant adjustments.
- A. Plant Adjustment No. 1 reduces the plant balance by \$1,230,049 as a result of the difference in the beginning plant balance utilized by RUCO and the Company. Since the last rate case was resolved by a settlement agreement the Commission Decision associated with that case did not contain detailed information about rate base items at the end of the last test year. As a result RUCO used its plant and accumulated depreciation amounts as recommended in the last rate case.

Plant Adjustment No. 2 reduces plant by \$36,500 to disallow the cost of the 2004 PACE engineering report that the Company was unable to locate and

Direct Testimony of Sonn S. Rowell Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104 which is associated with the expansion of PVWRF. This issue is discussed further in the Direct Testimony of William Rigsby. Plant Adjustment Nos. 3 and 4 remove a total of \$544,977 from plant to account for the retirement of the Wigwam, Bullard and Litchfield Greens lift stations. Plant Adjustment No. 5 adjusts plant downward by \$38,625 to account for plant transferred to Black Mountain Sewer. Plant Adjustment Nos. 6 and 7 capitalize test year expenses of \$8,534 and \$8,589, respectively that were inappropriately expensed. Plant Adjustment Nos. 8 and 9 remove \$170,375 of repair costs that were inappropriately capitalized. Plant Adjustment Nos. 10 through 14 replace affiliate profit that the Company had removed from various plant accounts. This affiliate profit was originally included in capitalized affiliate labor costs included in plant by the Company in the years since the last rate case. We are replacing this profit because we are removing all of the capitalized affiliate labor costs included in wastewater

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plant by the Company due to lack of support.

Direct Testimony of Sonn S. Rowell Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104 Adjustment Nos. 15 through 19 remove all of the capitalized affiliate labor from wastewater plant. The support associated with the capitalized affiliate labor was inadequate. This issue is discussed further in Section III below. Adjustment No. 20 reduces plant by \$3,500,000 as a result of RUCO's recommendation that the costs of correcting design and construction flaws at the Palm Valley Water Reclamation Facility ("PVWRF") be shared 50/50 between rate payers and shareholders. The Direct Testimony of Matthew Rowell provides the rationale for this adjustment. 4. Adjustments to Operating Income (Wastewater) Schedule 4 Q. How are the Operating Income Adjustments organized? Α. The Operating Income Adjustments are organized by account. Q. Please explain RUCO's Operating Income Adjustments. Operating Income Adjustment No. 1 to Measured Revenues

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This adjustment increases test year revenue by \$2,813 to account for RUCO's recommended increases in effluent rates. This adjustment is discussed further in Section IV below.

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#### Operating Income Adjustment No. 2 to Fuel for Power Production.

This adjustment moves \$425 to purchased power.

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#### Operating Income Adjustment No.3 to Chemicals.

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This adjustment removes \$13,002 of expenses that were incurred outside of the test year and moves \$831 to the Purchased Power account.

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#### Operating Income Adjustment No. 4 to Contractual Services - Other

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Adjustment No. 4a removes \$17,124 in expenses that should have been capitalized, \$16,582 in expenses that were incurred outside of the test year,

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\$19,784 in non-recurring expenses, \$16,428 in unnecessary/inappropriate

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expenses, and \$1,136 in expenses that are included in rate case expense.

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Adjustment No. 4b removes \$102,116 in net expenses associated with

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"Recon Fees to 4 Factor" due to lack of support for these expenses. (This

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adjustment is discussed further in the Direct Testimony of Matthew Rowell)

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Adjustment No. 4c removes \$191,850 in costs allocated to LPSCO by

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Algonquin Power Trust (This adjustment is discussed further in the Direct

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Testimony of Matthew Rowell)

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Adjustment No. 4d removes \$8,283 in unnecessary/inappropriate expenses

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allocated to LPSCO by Algonquin Water Resources.

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Adjustment No. 4e includes \$151,179 in test year expenses that were

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inappropriately capitalized.

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Direct Testimony of Sonn S. Rowell Litchfield Park Service Company Docket No. SW-01428A-09-0103 Docket No. W-01427A-09-0104

#### Operating Income Adjustment No. 5 to Contractual Services - Testing

Adjustment No. 5 removes \$6,398 in expenses that were incurred outside of the test year.

#### Operating Income Adjustment No. 6 to Transportation Expense

This adjustment removes \$17,702 in expenses that were unnecessary or inappropriate and \$25 in non-recurring expenses.

#### Operating Income Adjustment No. 7 to Rental Equipment

Adjustment No. 7 removes \$4,387 in non-recurring expenses.

#### Operating Income Adjustment No. 8 to Materials and Supplies

This adjustment removes \$5,975 in unnecessary or inappropriate expenses and \$7,545 in expenses incurred outside of the test year.

#### Operating Income Adjustment No. 9 to Miscellaneous Expenses

Adjustment No. 9 removes expenses totaling \$6,409 because they were unnecessary or inappropriate. Most of these expenses are merchant fees. See Water Division Operating Income Adjustment No. 8 for a discussion of why merchant fees are inappropriate.

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#### Operating Income Adjustment No.10 to Bad Debt Expense

This adjustment reduces bad debt expense by \$40,848. The bad debt expense incurred by LPSCO's wastewater division during the test year appears to be excessive. The bad debt expense of LPSCO's wastewater division increased by 1,483% (from \$2,773 to \$43,889) from the year ended September 30, 2006 to the test year. This massive increase in bad debt expense is not explained by LPSCO. LPSCO's water division did not experience a similar remarkable increase in bad debt expense. Because of the extraordinary nature of the wastewater division's test year bad debt expense, an adjustment was made to bring the bad debt expense into a more typical range. The bad debt expense we used was determined by calculating bad debt expense as a percent of revenue for the water division in the test year and applying that percentage to LPSCO wastewater division's revenues.

#### Operating Income Adjustment No. 11 to Depreciation Expense

Adjustment No. 11a reduces depreciation expense by \$225,045 to account for the various adjustments made to the plant accounts.

Adjustment No. 11b adjusts depreciation expense by \$9,935 as a result of the 2% expense limit on the IDA bonds. The 2% limit on IDA bond expenses is discussed in detail above in Section 2 Rate Base Adjustment No. 2.

#### Operating Income Adjustment No. 12 to Property Tax

This adjustment reduces property tax expense by \$62,962.

#### Operating Income Adjustment No. 13 to Income Tax Expense

This adjustment develops the income tax expense used in determination of the revenue requirement.

#### V. Capitalized Affiliate Labor

- Q. Please describe the sources of information you used to evaluate LPSCO's capitalized affiliate labor.
- A. I used three sources of information. First, I used the B-2 schedules provided by the Company in its application. Specifically Schedule B-2 pages 3.1 through 3.8 show plant additions and adjustments by year and by account. Relevant to this discussion are the plant adjustments for the removal of affiliate profit. Second, I used the Company's response to RUCO data request MJR 3.7. This data request sought clarification on how the affiliate profit removed from plant was calculated. In response to data request MJR 3.7 the Company provided an Excel spreadsheet that detailed how the affiliate profit numbers were developed. Third, I used information provided by the Company in response to Staff data requests JMM 1.52 and 1.77. These data requests asked for detailed backup for plant additions by year for selected accounts for the water and wastewater divisions respectively.

- Q. Could the information from these sources be reconciled?
  - At the aggregate level and broken out by year the affiliate profit shown on the B schedule matched closely with that shown in the response to data request MJR 3.7 (See Table 1 below.) At the individual plant account level within each year there were significant discrepancies between the B-2 schedules and the response to data request MJR 3.7. More importantly, however, the back-up provided in response to data requests JMM 1.52 and 1.77 could not be reconciled with the information provided in response to data request MJR 3.7. Table 2 shows the variance by account for 2008 between the capitalized affiliate labor costs taken from the Company's responses to data requests JMM 1.52 and 1.77 and MJR 3.7.
  - Q. Are there other problems with the information provided by the Company?
  - A. Yes. The back-up information for affiliate transactions provided in response to data requests JMM 1.52 and 1.77 was not adequate. For each specified account the Company provided a PDF file with scanned invoices and an Excel spreadsheet summarizing the content of the PDF file. In some cases, the information on the Excel file did not match with the invoices that were actually in the PDF file. Additionally, the invoices for affiliate labor contain almost no relevant information. Each invoice contains the name and address of the billed party (LPSCO), the billing party (Algonquin Water Services, Inc.) and the "Job Address." All three of these addresses are the same. Each invoice contains a field labeled "Description" (presumably the job description)

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which is blank. In addition, each invoice shows the employee title (e.g., "Manager") hours worked, hourly rate, and total amount billed. (See attachment 1 for sample affiliate invoices.) Based on this backup provided by the Company, there is no way to determine whether capitalization was the appropriate treatment for these affiliate billings.

Q. What does RUCO recommend regarding the capitalized affiliate labor?

Given that the various sources of information provided by the Company regarding capitalized affiliate labor are inconsistent and the backup information provided by the Company for their capitalized affiliate labor is inadequate, RUCO is compelled to recommend that all the capitalized affiliate labor be disallowed with the exception of capitalized affiliate labor included in accounts 304 and 333 for 2008. The backup information for accounts 304 and 333 for 2008 provided by LPSCO included substantially more detail than that provided for all other accounts.

Table 1. Affiliate Profit removed from plant by year

#### Water Division

Year	B-2	MJR 3.7	Variance
2004	\$6,326	\$7,967	-26%
2005	\$57,061	\$59,456	-4%
2006	\$38,310	\$38,310	0%
2007	\$103,128	\$103,128	0%
2008	\$74,573	\$75,148	-1%
Total	\$279,398	\$284,008	-2%

#### Wastewater Division

B-2	MJR 3.7	Variance
\$107,278	<b>\$107,278</b>	0%
\$172,590	\$172,590	0%
\$85,595	\$87,404	-2%
\$173,659	\$174,851	-1%
\$112,041	,\$113,207	-1%
\$651,163	\$655,330	-1%
	\$107,278 \$172,590 \$85,595 \$173,659 \$112,041	\$107,278 \$107,278 \$172,590 \$172,590 \$85,595 \$87,404 \$173,659 \$174,851 \$112,041 \$113,207

Table 2. 2008 Capitalized Affiliate Labor (selected accounts)

#### Water

	JMM 1.52	MJR 3.7	Variance
303	\$72,509	\$600	99%
304	\$189,611	\$168,159	11%
307	\$10,032	\$4,590	54%
311	\$38		100%
320	\$30,253	\$13,244	-337%
331	\$56		100%
333	\$56,104	\$1,000	98%
334	\$1,069		100%
335	\$281	\$100	64%
339	\$100		100%
340	\$28,753		100%
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346	\$6,500		100%
Total	\$395,305	\$189,243	52%

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#### Wastewater (selected accounts)

	JMM 1.77	MJR 3.7	Variance
354	\$66,768	\$158,042	-137%
360	\$94	\$1,200	-1180%
361	\$57,010	\$57,356	-5%
366	\$1,763	\$1,600	9%
371	\$18,784	\$2,813	85%
375	\$15,050	\$73,638	9%
380	\$32,472	\$200	99%
389	\$3,900	\$42,600	-992%
396	\$42,532	\$1,850	96%
Total	\$238,372	\$339,299	-42%

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#### VI. Rate Design

#### 1. Water Division

Q. Have you prepared a schedule presenting your recommended rate design?

A. Yes, as shown on Schedule 5, I am recommending a rate design consistent with RUCO's recommended revenue allocation and requirement. The rate design provides for a 58.8% increase spread equally across all classes of service, which is a decrease of 57.2 percentage points compared to the Company's requested 116% increase.

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- 1 Q. Are you recommending a tiered rate design?
  - A. Yes, I am recommending a three tiered rate structure for 5/8" and 3/4" meters and a two tiered rate structure for all large meter sizes.

#### 2. Wastewater Division

- Q. Have you prepared a schedule presenting your recommended rate design?
- A. Yes, as shown on Schedule 5, I am recommending a rate design consistent with RUCO's recommended revenue allocation and requirement. The rate design provides for a 28.47% overall increase which is a decrease of 50.06% percentage points compared to the Company's requested 78.53%. Across most classes of service the increase is spread equally, with the exception of measured service and effluent sales.
- Q. Are you recommending any changes to LPSCOs wastewater rate design?
- A. Yes, I am recommending that LPSCO no longer use a "market rate" for treated effluent and I am proposing a tariff rate of \$1.50 per thousand gallons for treated effluent.
- Q. Why are you proposing this change to LPSCO's effluent rates?
- A. Under LPSCO's current tariff its rate for effluent is a "market rate." This means that it can charge whatever rate for effluent it negotiates with each effluent customer (below a cap.) When I examined the current rates that LPSCO is charging its effluent customers, I found them to be excessively low.

Most of LPSCO's customers are currently paying \$0.17 per thousand gallons.

Given that treated effluent is a valuable resource and that effluent revenues help to offset the impact of rate increases on other customer classes, I believed an adjustment to LPSCO's effluent rates is appropriate. Accordingly I am recommending that LPSCO no longer use a "market rate" for treated effluent and that a tariff rate of \$1.50 per thousand gallons for treated effluent be established.

- Q. Does your silence on any of the issues, matters or findings addressed in the testimony of any of the witnesses for LPSCO constitute your acceptance of their positions on such issues, matters or findings?
- A. No, it does not.
- 12 Q. Does this conclude your direct testimony on LPSCO?
- 13 A. Yes, it does.

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#### **Qualifications of Sonn S. Rowell**

#### **Educational Background**

ARIZONA STATE BOARD OF ACCOUNTANCY Phoenix, AZ Certified Public Accountant Designation Certificate Number 10372-E

STATE BOARD OF DIRECTORS FOR COMMUNITY COLLEGES OF ARIZONA Phoenix, AZ Accountancy Teaching Certificate No. 19397

ARIZONA STATE UNIVERSITY
Tempe, AZ
Bachelor of Science Degree – Accountancy Major

#### Work Experience

DESERT MOUNTAIN ANALYTICAL SERVICES, PLLC (06/02 - Present)

#### Member/Manager

- Prepare annual reports for Arizona Corporation Commission Utilities and Corporations Divisions.
- Represent parties before the Arizona Corporation Commission for rate increases, financings, and other applications.
- Prepare quarterly and year-end payroll reporting for client businesses.
- Monthly, quarterly, and year-end processing of transactions for client businesses.
- Corporate, other business, and individual income tax preparation.
- Sales tax and Property tax reporting.

#### Recent Utility cases I have been involved in include:

Company Name/Class	Docket Number	Case Description
F. Wayne and Dorothy Thompson dba West Village Water Company – Class D	W-03211A-08-0622	Rate Case/Financing
Sonoita Valley Water Company	W-20435A-09-0296	Rate Case/Financing
Valle Verde Water Company – Class C	W-01431A-09-0360	Rate Case/Financing
Bob B. Watkins dba East Slope Water Company – Class C	W-01906A-09-0283	Emergency Surcharge
Antelope Run Water Company – Class D	W-02327A-09-0284	Emergency Surcharge
Indiada Water Company, Inc Class E	W-02031A-09-0285	Emergency Surcharge
Wickenburg Ranch Water, LLC – no customers	W-03994A-07-0657	Rate Adjustment
Southland Utilities Company, Inc. – will be filed as a Class C due to proposed rates within the next month	W-02062A-TBD	Rate Case/Financing
Aubrey Water Company – Class D	W-03476A-06-0425	Rate Case
Picacho Peak Water Company, Inc. – Class D	W-02351A-07-0686	Rate Case/Financing
Empirita Water Company, LLC – Class E	W-03948A-07-0495	Rate Case

#### ARIZONA CORPORATION COMMISSION (07/98 - 05/02)

#### Rate Analyst II

- Determine necessity and amount of revenue recommended in utility rate increase proceedings
- Revise standard filing documents, train new employees, and review peer work product
- Determine impact on Company financial conditions due to various tariff filings
- Present at Open Meeting and testify at hearings about recommendations
- Lead advisory groups formed to develop recommended policies and procedures to regulate utilities

#### Utility Auditor III

- Determine rate increase application sufficiency or deficiency for public utilities
- Conduct on-site inspection of utility assets
- Audit utility expenses and plant additions since prior rate increase proceeding
- Coordinate with other departments regarding specialty areas of utility analysis
- Prepare staff report or testimony stating findings and recommendations based on audit results

#### **ATTACHMENT 1**

#### **DIRECT TESTIMONY**

OF

SONN S. ROWELL, CPA

**Examples of Affiliate Invoices** 

#### Invoice

Remit To: Algonquin Water Services LLC 12725 W. Indian School Road Suite D101 Avondale, AZ 85323

Bill To: Litchfield Park Service Compan Attn:

12725 W Indian School Rd Suite D101 Avondale, AZ 85323 Job Address: 12725 W Indian School Rd Suite D101 Avondale, AZ 85323

Date	Invoice Number	Customer Order Number	Customer Number	Net Terms
4/26/2007	JC3216	LPSCO	400LPSCO	··
	•	Description		

Labor	Quantity	Unit Chg	Billable Amount
Manager	58.00	125.00	7,250.00
		Labor Total:	7,250.00
	Re	Billing Amount: tention Withheld: Retention Due:	US\$7,250.00 US\$0.00 US\$0.00
		Subtotal: Misc: Tax:	US\$7,250.00 US\$0.00 US\$0.00
		Pay This Amount:	US\$7,250.00

#### Invoice

Remit To: Algonquin Water Services LLC 12725 W. Indian School Road Suite D101 Avondale, AZ 85323

Bill To:

Litchfield Park Service Compan

12725 W Indian School Rd Suite D101 Avondale, AZ 85323

Job Address:

12725 W Indian School Rd

Suite D101

Avondale, AZ 85323

Date Invoice Number

Customer Order Number Customer Number Net Terms 

5/29/2007 JC3386

LPSCO

400LPSCO

Description

Labor	Quantity	Unit Chg	Billable Amount
Manager Controller	25.25 1.75	125.00 100.00	3,156.25 175.00
		Labor Total:	3,331.25
Contractors	Quantity	Unit Chg	Billable Amount
	1.00 1.00 1.00	168.75 168.75 150.00	168.75 168.75 150.00
		Contractors Total:	487.50
		Billing Amount: Retention Withheld: Retention Due:	US\$3,818.75 US\$0.00 US\$0.00
		Subtotal: Misc: Tax:	US\$3,818.75 US\$0.00 US\$0.00
		Pay This Amount:	US\$3,818.75

#### Invoice

Remit To: Algonquin Water Services LLC 12725 W. Indian School Road Suite D101 Avondale, AZ 85323

Bill To: Litchfield Park Service Compan Attn:

12725 W Indian School Rd Suite D101 Avondale, AZ 85323 Job Address: 12725 W Indian School Rd Suite D101 Avondale, AZ 85323

Date	Invoice Number	Customer Order Number	Customer Number	Net Terms
6/27/2007	JC3564	LPSCO	400LPSCO	ANY CE: THE TAX COT COT THE THE CO. CO. CO. COT COT COT COT COT COT COT COT COT COT
		Description		

Labor	Quantity	Unit Chg	Billable Amount
Manager	36.25	125.00	4,531.25
		Labor Total:	4,531.25
	Re	Billing Amount: tention Withheld: Retention Due:	US\$4,531.25 US\$0.00 US\$0.00
		Subtotal: Misc: Tax:	US\$4,531.25 US\$0.00 US\$0.00
		Pay This Amount:	US\$4,531.25

#### Exhibit 1

#### **DIRECT TESTIMONY**

OF

SONN S. ROWELL, CPA

**Water Division Schedules** 

Schedule 1 Page 1 of 2

#### Revenue Requirement

LINE	, and a second s	(A) COMPANY OCRB/FVRB		(B) RUCO OCRB/FVRB	
NO.	DESCRIPTION	 COST		COST	
1 2	Adjusted Original Cost/Fair Value Rate Base	\$ 37,930,921	\$	37,222,878	
3 4	Adjusted Operating Income/(Loss)	\$ (282,894)	\$	389,947	
5 6	Current Rate of Return (L3 / L1)	-0.75%		1.05%	
7 8	Required Operating Income (L9 X L1)	\$ 4,327,918	\$	2,873,606	
9 10	Required Rate of Return on Fair Value Rate Base	11.410%		7.720%	
11 12	Operating Income Deficiency (L7 - L3)	\$ 4,610,812	\$	2,483,659	
13 14	Gross Revenue Conversion Factor (Schedule 1, Page 2)	 1.6286	-	1.6286	
15 16	Required Increase in Gross Revenue Requirement (L11 X L13)	\$ 7,509,329	\$	4,044,974	
17 18	Adjusted Test Year Revenue	\$ 6,475,002	\$	6,878,710	
19 20	Proposed Annual Revenue (L15 + L17)	\$ 13,984,331	\$	10,923,684	
21 22	Required Percentage Increase in Revenue (L15 / L17)	115.97%		58.80%	
23	Rate of Return on Common Equity	12.500%		8.010%	

#### References:

Column (A): Company Schedules A-1 and C-1 Column (B): RUCO Schedules 2 and 4

#### **GROSS REVENUE CONVERSION FACTOR**

LINE NO.	DESCRIPTION	(A)	(B)	(C)		(D)
	CALCULATION OF CROSS BEVENUE CONVERGION FACTOR					The same of the sa
1	CALCULATION OF GROSS REVENUE CONVERSION FACTOR: Revenue					
2		1.0000				
3	Combined Federal And State Tax Rate (Line 12)	(0.3860)	<u>-</u>			
4	Subtotal (Line 1 + Line 2)  Revenue Conversion Factor (L1 / L3)	0.6140	•			
5	November 30114E131011 Factor (E17 E3)	1.6286	]			
6	CALCULATION OF EFFECTIVE TAX RATE:					
7	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%				
8	Arizona State Income Tax Rate	6.9680%				
9	Federal Taxable Income (L7 - L8)	93.0320%	-			
10	Applicable Federal Income Tax Rate (Col. (D), L43)	34.0000%				
11	Effective Federal Income Tax Rate (L9 X L10)	31.6309%				
12	Combined Federal And State Income Tax Rate (L8 + L11)	38.5989%	-			
13			=			
14	Required Operating Income (Sch1, Pg 1, Col. (B), L7)	\$ 2,873,606				
15	Adjusted T.Y. Oper'g Inc. (Loss) (Sch1, Pg 1, C (B), L3)	389,947				
16	Required Increase In Operating Income (L14 - L15)		\$2,483,659			
17						
18	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 1,539,694				
19	Income Taxes On Test Year Revenue (Col. (D), L40)	(21,621)				
20	Required Increase In Revenue To Provide For Income Taxes (L18	- L19)	\$1,561,315			
21		,		-		
22	Total Required Increase In Revenue (L16 + L20)		\$4,044,974			
23				RUCO		
24	CALCULATION OF INCOME TAX:			RECOMMENDE	:D	
25	Revenue (Sch -1, Pg 1, Col. (B), L19)			\$ 10,923,6		
26	Operating Expense Excluding Income Tax ( Sch4, Col. (E), L3	7 - L32)		6,510,3		
27	Synchronized Interest (Col. (C), L48)			424,3		
28	Arizona Taxable Income (L25 - L26 - L27)		•	\$ 3,988,9		
29	Arizona State Income Tax Rate			6.968		
30	Arizona Income Tax (L28 X L29)		•	0.000	\$	277,951
31	Fed. Taxable Income (L28 - L30)			\$ 3,711,0		277,001
32	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ 7,5		
33	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			6,2		
34	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			8,5		
35	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			91,6		
36	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			1,147,8		
37	Total Federal Income Tax (L32 + L33 + L34 + L35 + L36)			1, 147,0	40	1,261,743
38	Combined Federal and State Income Tax (L30 + L37)				-\$	20 P 10 P
39	Tomained Foundation and Otation Mobile Fax (200 F 201)				Ф	1,539,694
40	Test Year Combined Income Tax, RUCO as Adjusted ( Sch 4,	Cal (C) 131)			æ	(04 604)
41	RUCO Adjustment To Proposed Inco		40) (500 50	h 1 Cal (D) 133	\$	(21,621)
42	Nooo Adjustment To Froposed Inco	ille lax (ESO - E	.40) (See Sc	ii 1, Col. (D), L32	) 🚢	1,561,315
43	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)					0.4.000/
44	Applicable rederal frictine rax Rate (Col. (D), L307 Col. (C), L24)					34.00%
45	CALCULATION OF INTEREST SYNCHRONIZATION:					
46	Rate Base			\$ 37,222,8	78	
47	Weighted Avg. Cost of Debt			1.1		
48	Synchronized Interest (L35 X L36)			\$ 424,3		
	. ,		=			

Litchfield Park Service Company - Water Division Docket No. SW-01428-09-0103 and W-01427A-09-0104 Test Year Ended September 30, 2008

# RATE BASE - ORIGINAL COST

LINE NO.		- 0	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO ADÌM'T No 1	(C) RUCO ADJM'T	(D) RUCO ADJM'T	~ 8	(E) RUCO ADJTED `
					1	200	3	מאט ואסאט
- 0	Gross Utility Plant in Service	₩	73,731,715	\$ (841,129)			↔	72,890,586
l ω <b>4</b>	Accumulated Depreciation		(9,097,645)	189,493				- (8,908,152)
y 22	Net Utility Plant in Service (Sum L1 & L3)	<del>s</del>	64,634,070	\$ (651,636)	- <del>У</del>	ı <del>У</del>	မှ	63,982,434
o	Less: Advances in Aid Of Construction	€9	(24,583,673)				<del>U</del>	(27 583 673)
9 0	Contribution in Aid of Const.	ь	(3.104.068)					(0.70,000,475)
7 7	Accumulated Amortization of CIAC	-						860,706
<u>4</u> $\epsilon$		A	(2,243,362)	ر ج	1 <del>(</del> 2)	ا <del>دہ</del>	↔	(2,243,362)
4 5 5	Customer Meter Deposits Deferred Income Tax	₩	(68,685) (24,518)				↔	(68,685) (24,518)
17	Plus:							
<u>∞</u> 60	Unamortized Debt Issuance Costs Deferred Regulatory Assets	<del>⇔</del>	134,528 82,561		\$ (48,150)	\$ (8.256)		86,378
20								)
22	TOTAL RATE BASE (Sum Lines's 5,8,12-19)	8	37,930,921	\$ (651,636)	\$ (48,150)	\$ (8,256)	မှ	37,222,878

# References:

Column (A): Company Schedule B-1

Column (B): RUCO Schedule 2, Page 2 Column (C): RUCO Schedule 2, Page 3 Column (D): RUCO Schedule 2, Page 4 Column (E): Sums of Column (A) through Column (D)

## EXPLANATION OF RATE BASE ADJUSTMENT NO. 1 TO UTILITY PLANT IN SERVICE

LINE			
NO.	DESCRIPTION	AMOUNT	REFERENCE
1	RUCO Proposed Utility Plant In Service At End of Test Year	\$72.890.586	RUCO Schedule 3 Page 1
2		<b>,</b> , _, , , , , , , , , , , , , , , , ,	Tropic deliberation of Frage 1
3	Company Proposed Utility Plant In Service At End of Test Year	73,731,715	Company Schedule B-1
4		, ,	,,
5	RUCO Proposed Adjustment To Utility Plant in Service	\$ (841,129)	-
6	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	=
7			
8	Accumulated Depreciation At End of Prior Test Year	\$ 2,016,268	Staff Amount Per Decision 65436
9	2001 Depreciation Expense	301,412	
10	2002 Depreciation Expense	428,370	
11	2003 Depreciation Expense	675,633	
12	2004 Depreciation Expense	832,647	
13	2005 Depreciation Expense	1,036,740	
14	2006 Depreciation Expense	1,151,512	
15	2007 Depreciation Expense	1,227,908	
16	2008 Depreciation Expense (9 months)	1,323,990	
17	. Subtotal	\$ 8,994,481	Sum of Lines 16 through 19
18			
19	Less 2003 Retirements	\$ (84,979)	
20	Less 2006 Retirements	(1,350)	
21	_		
22	RUCO Proposed Accumulated Depreciation At End of Test Year	\$ 8,908,152	Sum of Lines 17, 19, and 20
23			
24	Company Proposed Accumulated Depreciation At End of Test Year	\$ 9,097,645	Company Schedule B-1
25	_		
26	RUCO Proposed Adjustment To Accumulated Depreciation	\$ (189,493)	Line 22 - Line 24

#### EXPLANATION OF RATE BASE ADJUSTMENT NO. 2 TO UNAMORTIZED DEBT ISSUANCE COSTS

Line No.	Description	1	(A) 999 Series Bonds	2	(B) 001 Series Bonds		(C) Combined Total (A) + (B)
1 2	Aggregate Principal Balance of IDA Bonds Allowable Debt Issuance Cost as per 1999 & 2001 IDA Bond Contracts	\$	5,335,000 2.00%	\$	7,500,000 2.00%	\$	12,835,000
3 4 5	Total Allowable Debt Issuance Cost (L1 X L2) Term of Bond Issue, in Years	\$	106,700 24	\$	150,000 30	\$	256,700
6 7 8	Annual Debt Issuance Amortization Expense - Straight Line (L4 / L5) Number of Months in Year	\$	4,446 12	\$	5,000 12	\$	9,446
9 10 11	Allowable Monthly Amortization Expense (L7 / L8) Months Remaining before the Bonds Reach Maturity*	\$	370 168	\$	417 264	\$	787
12 13 14	Unamortized Debt Issuance Costs RUCO as Adjusted (L10 X L11)	\$	62,242	\$	110,000	\$	172,242
15 16 17	Unamortized Debt Issuance Costs Company as Filed	\$	141,268	\$	127,274	\$	268,542
18 19	Unamortized Debt Issuance costs RUCO as Adjusted		62,242		110,000		172,242
20 21	Decrease to Unamortized Debt Issuance Costs	\$	(79,027)	\$	(17,274)	\$	(96,301)
22	Walter Division Cost Allocation Percent						
24	RUCO Unamortized Debt Is	suar	nce costs - V	Vat	er Division	\$	(48,150)

<sup>\*</sup> Information on the months remaining before the bonds reach maturity was provided in the Company's response to Staff Data Request JMM 1.32, with the 1999 Series IDA Bonds maturing October 1, 2023, and the 2001 Series IDA Bonds Maturing October 1, 2031.

#### EXPLANATION OF RATE BASE ADJUSTMENT NO. 3 TO DEFERRED REGULATORY ASSETS

LINE			
NO.	DESCRIPTION	AMOUNT	REFERENCE
1	Deferred Regulatory Assets Per Company (TCE Plume)	\$ 82,561	Company Schedule B-1
2			
3	Amortization Period In Years	10	Company Schedule C-2, Page 13
4			
5	Annual Amortization Expense Per Company	\$ 8,256	Line 1 / Line 3
6			=
7			
8	Portion of Cost Allocated to Rate Base Per RUCO	\$ 74,305	Line 1 - Line 5
9		,	
10	Cost Allocated to Rate Base Per Company	82.561	Company Schedule B-1
11	,	,,,,,,	
12	RUCO Proposed Adjustment To Deferred Regulatory Assets	\$ (8.256)	Line 8 - Line 10
13	The second representations to be seen a regulatory resource	<del></del>	=
14			
15	Portion of Cost Allocated to Expense Per RUCO	\$ 8256	Line 1 - Line 8
16	Total of obstantouted to Expense I of Negoo	ψ 0,200	Ellie i Ellie o
	Cost Allegated to Europea Day Company	9.256	Company Schodule C 2, Bose 12
17	Cost Allocated to Expense Per Company	8,256	Company Schedule C-2, Page 13
18			<del>-</del>
19	RUCO Proposed Adjustment To Miscellaneous Expense	\$ -	_Line 15 - Line 17

## UTILITY PLANT IN SERVICE SCHEDULE TEST YEAR ENDED SEPTEMBER 30, 2008

LINE	ACCT.		_	(A) COMPANY		(B) RUCO	DH	(C) CO PLANT
NO.	NO.	ACCOUNT NAME		J TEST YR	ΔDI	USTMENTS	NO	VALUE
	110.	710000111 TOTAL		3 1231 TK	700	OOTIVILIA 12		VALUE
1	301	Organization	\$	-	\$	21,100	\$	21,100
2	302	Franchises		_		-		· <u>-</u>
3	303	Land and Land Rights		1,284,595		(96,170)		1,188,425
4	304	Structures and Improvements		24,698,293		(446,942)		24,251,351
5	307	Wells and Springs		2,382,102		(31,705)		2,350,397
6	310	Power Generation Equipment		202,269				202,269
7	311	Electric Pumping Equipment		948,213		(157,561)		790,652
8	320	Water Treatment Equipment		1,337,824		(20,253)		1,317,571
9	320.1	Water Treatment Plants		1,866,965				1,866,965
10	320.2	Chemical Solution Feeders		-		~		· · · · -
11	330	Distribution Reservoirs & Standpipes		430,644		(3,839)		426,805
12	330.1	Storage Tanks		_		_		, -
13	330.2	Pressure Tanks		~		_		-
14	331	Transmission and Distribution Mains		28,929,171		(18,048)		28,911,123
15	333	Services		4,249,744		(57,961)		4,191,783
16	334	Meters		4,138,752		(1,739)		4,137,013
17	335	Hydrants		2,055,781		(1,258)		2,054,523
18	336	Backflow Prevention Devices		38,387		-		38,387
19	339	Other Plant and Miscellaneous Equipment		265,281		(5,175)		260,106
20	340	Office Furniture and Equipment		551,757		-		551,757
21	340.1	Computers and Software		_		-		, -
22	341	Transportation Equipment		177,165		(17,669)		159,496
23	342	Stores Equipment		31,711		-		31,711
24	343	Tools, Shop, and Garage Equipment		23,350				23,350
25	344	Laboratory Equipment		***		-		-
26	345	Power Operated Equipment		_		-		-
27	346	Communications Equipment		119,710		(3,908)		115,802
28	347	Miscellaneous Equipment		_		` <u>-</u>		
29	348	Other Tangible Plant		-		-		_
30								
31	TOTA	L WATER UTILITY PLANT IN SERVICE	\$	73,731,714	\$	(841,128)	\$	72,890,586

Litchfield Park Service Company - Water Division Docket No. SW-01428A09-0103. Test Year Ended September 30, 2008

# TEST YEAR PLANT SCHEDULE YEAR ENDED SEPTEMBER 30, 2008

NO.	LINE ACCT. NO. NO.	. ACCOUNT NAME	COMPANY AS FILED	RUCO ADJ 1	RUCO ADJ 2	RUCO ADJ 3	RUCO ADJ 4	RUCO ADJ 5	RUCO ADJ 6	RUCO ADJ 7	RUCO ADJ 8	TOTAL PG 1 ADJ
- ~	307	Organization Franchises	, 6	\$ 21,100								\$ 21,100
ı ω <b>4</b>	303	Land and Land Rights Structures and Improvements	1,284,595		\$ (47.721) \$	602	\$ 28 165	\$ 22.752	\$ 00 01 17		\$ (96,170)	(96,170)
2	307	Wells and Springs	2,382,102			)			166	1,925		103,713
1 0	310	Power Generation Equipment	202,269									
~ α	320	Electric Pumping Equipment	948,213		(31,158)	199	8,399					(22,560)
၁ တ	320.1	-	1,337,824				3,517	069'6	2,049	6,948		22,204
10	320.2		- 1									•
7	330	Distribution Reservoirs & Standpipes	430,644					3.381	696	111		4 461
12	330.1								)	:		- - - - -
13	330.2	_	1									
4	331	Transmission and Distribution Mains	28,929,171									•
15	333	Services	4,249,744			4,734	6,563	400				11,697
16	334	Meters	4,138,752			280	477	204				961
17	335	Hydrants	2,055,781			511	163			18		692
18	336	Backflow Prevention Devices	38,387							)		
19	339	Other Plant and Miscellaneous Equipment	265,281									•
20	340	Office Furniture and Equipment	551,757									•
21	340.1											,
22	341		177 165									
23	342	Stores Equipment	31 711									
40	343	Tools Shop and Caraca Equipment	22.250									•
. r.	344	l aborator, Equipment	20,000									
3 6	24.	Dower Operated Equipment	•									•
1 0	2 6	Cowel Operated Equipment										
77	346	Communications Equipment	119,710				1,394	1,883	28	787		4.092
28	347	Miscellaneous Equipment	•									. '
53	348	Other Tangible Plant	1									,
3												
	TOTA	THAT IS OUT AND IS AND	\$ 72 724 744	9 24 400		000	000			-		
	₹		4 /3,/31,/14	\$ 21,100	\$ (8,8/9) \$	6,326	\$ 57,063	\$ 38,310	\$ 103,127	\$ 9,789	\$ (96,170) \$	999'09
	ADJ 1		by last Decision									
	ADJ 2		ation in 2003									
	ADJ 3		Affiliate Profit									
	AUUA AUUA	Reverse Company Adjustment for 2005 Affiliate Profit Reverse Company Adjustment for 2006 Affiliate Profit	offiliate Profit									
	ADJ 6		iffiliate Profit									
-	ADJ 7		ffiliate Profit									
•	ADJ 8	Remove unsupported affiliate labor and accruals, and rent from 2008 plant additions	ccruals, and ren	t from 2008	plant additions							
			\$ (27,040)									
		Capitalized Affiliate Labor - New Spring	(40,013)							•		
		Rent to Maryland 40, LLC	(000'6)									
		Unsupported Accurais										
		Studentstand	(0E 170)									

(27,040) (40,013) (9,000) (20,117) (96,170)

ाव Adjustment 8

Litchfield Park Service Company - Water Division Test Year Ended September 30, 2008 Docket No. SW-01428A09-0103

# YEAR ENDED SEPTEMBER 30, 2008 **TEST YEAR PLANT SCHEDULE**

TOTAL PG 2 ADJ	\$ (308,536) (42,181) (42,457) (42,457) (5,700) (2,700) (1,550) (1,569) (17,669) (17,669)	(8,000)
RUCO ADJ 17	(17,669)	\$ (32,612)
RUCO ADJ 16	\$ (7,072)	(11,242) \$
RUCO ADJ 15	(c)	(27,700) \$
RUCO ADJ 14	\$ (267,183) (31,569) (8,300)	(8,000)
RUCO ADJ 13		
RUCO ADJ 12	\$ (33,156) (19,238) (875) (575)	\$ (47,548) \$ (53,844) \$
RUCO ADJ 11		\$ (47,548)
RUCO ADJ 10	\$ (1,125) (375) (10,915) (800)	\$ (13,215)
RUCO ADJ 9	(6,200)	\$ (6,200) \$
ACCOUNT NAME	Organization Franchises Land and Land Rights Structures and Improvements Wells and Springs Wells and Springs Power Generation Equipment Water Treatment Equipment Water Treatment Equipment Chemical Solution Feeders Distribution Reservoirs & Standpipes Storage Tanks Transmission and Distribution Mains Services Meters Hydrants Backflow Prevention Devices Other Plant and Miscellaneous Equipment Computers and Software Transportation Equipment Computers and Goftware Transportation Equipment Laboratory Equipment Laboratory Equipment	345 Power Operated Equipment 346 Communications Equipment 347 Miscellaneous Equipment 348 Other Tangible Plant TOTAL WATER PLANT
LINE ACCT. NO. NO.	301 302 303 304 310 320.1 320.2 330.1 330.2 330.2 330.3 300.3 300.	345 346 347 348 TOTAL
NO.	- 2 8 4 4 9 0 0 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	26 27 28 29 30 31

ADJ 10 Remove 2004 unsupported affiliate labor costs by estimated year related asset placed in service. ADJ 11 Remove 2005 unsupported affiliate labor costs by estimated year related asset placed in service.

ADJ 12 Remove 2006 unsupported affiliate labor costs by estimated year related asset placed in service.

ADJ 13 Remove 2007 unsupported affiliate labor costs by estimated year related asset placed in service.

ADJ 14 Remove 2008 unsupported affiliate labor costs by estimated year related asset placed in service.

ADJ 15 Remove 3 repair invoices (\$3,000 times 2, and 1 @ \$2,700) and 1 unsupported amount (\$19,000) from 2001 plant additions from Yahweh Contracting.

ADJ 16 Remove 2 repair invoices from Yahweh (\$2,085 times 2) and 1 rent invoice from Suncor (\$7,072) from 2002 plant additions.

ADJ 17 Remove 3 unsupported amounts from Huges Supply (\$5,081, \$4,931, and \$4,931), one invoice from W. Fisher for \$2,750, and 2002 plant additions one invoice from Courtesy Chevrolet (\$14,919) from 2002 plant additions.

Litchfield Park Service Company - Water Division Test Year Ended September 30, 2008 Docket No. SW-01428A09-0103

# YEAR ENDED SEPTEMBER 30, 2008 **TEST YEAR PLANT SCHEDULE**

N S	INE ACCT.	F. ACCOUNT NAME	π <b>4</b>	RUCO ADJ 18	RUÇO ADJ 19	RUCO ADJ 20	RUCO ADJ 21	RUCO ADJ 22	RUCO ADJ 23	TOTAL PG 3 ADJ	TOTAL ALL ADJS
- 6	301 302	Organization Franchises							↔	<del>69</del>	21,100
დ 4	303	Land and Land Rights Stringlings and Improvements		(040 440)						i 1	(96,170)
22	307	Wells and Springs		(242, 119)						(242,119)	(446,942)
ပ ၊	310	Power Generation Equipment								1	(22):(1)
<b>~</b> o	311	-			(53,409)		(64,281)		1,114	(116,576)	(157,561)
ာတ	320.1	Water Treatment Plants								i	(20,253)
10	320.2	_								4 1	, ,
Ξ:	330									1	(3,839)
12	330.1									1	. '
<del>ب</del>	330.2	-								ı	
4	331	Transmission and Distribution Mains			(26,648)				8.600	(18.048)	(18 048)
15	333	Services		(8,411)		(3,227)				(11,638)	(57,913)
16	334	Meters								())	(1,739)
17	335							(400)		(400)	(1,258)
8	336										(224:)
9	339	_									(5.175)
20	340	_								,	()
7	340.1	Computers and Software								ŧ	
22	341	Transportation Equipment								•	(17,669)
23	342	Stores Equipment								1	
24	343	Tools, Shop, and Garage Equipment								ı	•
22	344	Laboratory Equipment									•
56	345	Power Operated Equipment								•	•
27	346	Communications Equipment									(3.908)
28	347	Miscellaneous Equipment								ι	. '
67.	348	Other Langible Plant									•
33											
32 T	OTAL	TOTAL WATER PLANT	₩	(250,530) \$	\$ (20,08)	(3,227) \$	(64,281) \$	(400) \$	9,714 \$	(388,781) \$	(841,128)

ADJ 18 Remove 1 repair invoice from Pyramid West Pipeline (\$1,391), 1 unsupported amount from Pyramid (\$7,020), and a journal entry amount not supported by backup (\$242,119) from 2004 plant additions.

ADJ 19 Remove 1 repair invoice from CH2OICE Pump (\$53,409), and several repair invoices from Ram Pipelines that total \$26,648 from 2005 plant additions. ADJ 20 Remove 1 repair invoice from Yahweh (\$2,450), and 1 repair invoice from Ram Pipelines (\$777) from 2006 plant additions.

ADJ 21 Remove repair invoice from CH2OICE Pump for \$64,281 from 2008 plant additions.

ADJ 22 Remove repair invoice from MS Hernandez Construction for \$400 from 2003. ADJ 23 Capitalize amount removed from expenses from Hydro Controls (2008) for well site clocks, and from Harasimhan Consulting (2007) for distribution system evaluation.

Schedule 4 Page 1 of 15

#### **OPERATING INCOME**

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	REF	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROPOSED INCREASE	RE	(E) RUCO AS ECOMM'D
_								
1	Revenues	<b>*</b> • • • • • • • • • • • • • • • • • • •					• 4	0.700.400
2	Metered Water Revenue	\$6,347,481	\$ 403,707	1	\$ 6,751,188	\$ 4,044,974	\$ 1	0,796,162
3 4	Unmetered Water Revenue Other Water Revenue	407.500			407 500			407.500
5	Other water Revenue	127,522			127,522			127,522
6	TOTAL OPERATING REVENUE	\$6,475,003	\$ 403,707		\$ 6,878,710	\$ 4,044,974	¢ 1	0,923,684
7	TOTAL OF LIVETING NEVEROL	\$6,475,003	\$ 403,707		\$ 0,070,710	\$ 4,044,974	ψı	0,923,004
8	Operating Expenses							
9	Salaries & Wages	\$ -			\$ -		\$	
10	Purchased Water	5,011			5,011		Ψ	5,011
11	Purchased Power	1,013,811			1,013,811			1,013,811
12	Fuel for Power Production	58,147	(56,381)	2	1,766			1,766
13	Chemicals	503,278	(2,309)	3	500,969			500,969
14	Repairs and Maintenance	44,001	(-,)	_	44,001			44,001
15	Office Supplies and Expense	-			-			-
16	Outside Services	12,469			12,469			12,469
17	Outside Services - Other	2,382,976	(482,958)	4a-d	1,900,018			1,900,018
18	Outside Services - Legal	14,317			14,317			14,317
19	Water Testing	28,365	(590)	5	27,775			27,775
20	Rents '	10,647			10,647			10,647
21	Transportation Expenses	151,879	(24,761)	6	127,118			127,118
22	Insurance - General Liability	95,469			95,469			95,469
23	Insurance - Health and Life	3,319			3,319			3,319
24	Regulatory Comm, Expense	63,662			63,662			63,662
25	Regulatory Comm, Exp Rate Case	70,000	(20,000)	7	50,000			50,000
26	Miscellaneous Expense	81,664	(22,027)	8	59,637			59,637
27	Bad Debt Expense	3,264			3,264			3,264
28	Depreciation & Amortization	2,291,982	(49,953)	9a-b	2,242,029			2,242,029
29	Taxes Other Than Income	_	(		-			-
30	Property Taxes	373,354	(38,253)		335,101			335,101
31	Income Tax	(449,717)	428,096	11	(21,621)	1,561,315		1,539,694
32					-			-
33 34	TOTAL OPERATING EXPENSES	<b>₾</b> € 757 000	¢ (200 125)		¢ 6 400 700	¢ 4 564 345	_	9.050.070
35	TOTAL OPERATING EXPENSES	\$6,757,898	\$ (269,135)		\$ 6,488,763	\$ 1,561,315	\$	8,050,078
36	OPERATING INCOME (LOSS)	\$ (282,895)	\$ 672,842		\$ 389,947	\$ 2,483,659	\$	2,873,606
-	3. 2.3(1116 1166 III (2000)	Ψ (202,030)	Ψ 012,042		Ψ 000,047	Ψ £, <del>1</del> 00,003	Ψ	223 W 1 O, OOO

# EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 1 TO METERED WATER REVENUES

LINE			
NO.	DESCRIPTION	REFERENCE	AMOUNT
1	Company Proforma De	crease to Test Year Revenue	\$ (403,707)
2			
3	RUCO Proposed De	crease to Test Year Revenue	-
4			
5	, RUCO Adjustment to I	ncrease Test Year Revenue	\$ 403,707
6			
7	Portion of Company Adjustment 4 rela	ited to contract with the City of	f Goodyear,
8	AZ. Company decreased test year rev	venue to adjust for the potenti	al loss of
9	this customer.		

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# EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 2 TO FUEL FOR POWER PRODUCTION

LINE NO.	DESCRIPTION	REFERENCE	Α	MOUNT
1	Kohler Rental Power	Invoice 5060152	\$	(36,064)
2	Kohler Rental Power	Invoice 5061075		(23,170)
3	Kohler Rental Power	Invoice 5057208		(25,297)
4	Kohler Rental Power	Invoice 5063232		(7,850)
5	Diesel fuel accrual adjustments	JE 46643		36,000
6				,
7	<b>RUCO Adjustment to Rer</b>	nove Non-Recurring Expenses	\$	(56,381)

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# EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 3 TO CHEMICALS

LINE NO.	DESCRIPTION	REFERENCE	ΑN	MOUNT
	DESCRIPTION .	TALL LINE IN CO.		100111
1	HILL BROTHERS CHEMICAL CO.	Invoice 04293499	\$	(305)
2	HILL BROTHERS CHEMICAL CO.	Invoice 04293606		(213)
3	HILL BROTHERS CHEMICAL CO.	Invoice 04293605		(228)
4	HOME DEPOT	JE 46704		(814)
5	HOME DEPOT	JE 47955		(749)
6				
7	RUCO Adjustment To Remove E	xpenses Outside of Test Year	\$	(2,309)

#### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4a TO OUTSIDE SERVICES - OTHER

LINE			
NO.	DESCRIPTION	AMOUNT	REFERENCE
1	Hydro Controls and Pump Systems (Clocks for well sites)	\$ (1,114) Invoic	e No. 227 (June 9, 2008)
2	Narasimhan Consulting Services (Distribution System Evaluation)	(8,600) Invoic	e No. 0252-1 (Oct. 27, 2007)
3	•	, ,	, , ,
4	RUCO Adjustment To Remove Expenses To Be Capitalized	\$ (9,714)	
5	·		
6			
7	Southwest Ground-water Consultants (Well Spacing Evaluation)	\$ (1,380) Invoic	e No. B.1426-2-1 (Feb. 13, 2008)
8	Southwest Ground-water Consultants (Well Rehabilitation-Dry Ice)	(4,072) Invoic	e No. B.1591-2 (Mar. 20, 2008)
9	Southwest Ground-water Consultants (Recharge Characterization)		e No. B.1426-11 (June 25, 2008)
10	Southwest Ground-water Consultants (Report for Production Well)	(1,225) Invoic	e No. B.1661-1V (July 11, 2008)
11	Southwest Ground-water Consultants (Report for Production Well)		e No. B.1661-1 (July 11, 2008)
12	Southwest Ground-water Consultants (Well Impact Analysis)	(4,823) Invoic	e No. B.1688-1 (Sept. 8, 2008)
13	Burke Hansen, LLC (Real estate appraisal)	, ,	e No. 8107N (June 5, 2008)
14		,	,
15	RUCO Adjustment to Remove Non-Recurring Expenses	\$ (19,912)	
16			
17	TOTAL RUCO ADJUSTMENT TO OUTSIDE SERVICES - OTHER	\$ (29,625)	

Litchfield Park Service Company - Water Division Docket No. SW-01428A09-0103 Test Year Ended September 30, 2008

#### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4b TO OUTSIDE SERVICES - OTHER

LINE NO.	GENERAL LEDGER ACCOUNT	VENDOR	DESCRIPTION	A	MOUNT
1	Central Office - Accounting/Administration	Algonquin Power Trust	GENERAL ACCTIN FEE - LPSCO	\$	(2,689)
2	Central Office - Human Resources	Algonquin Power Trust	GEN HR FEE- LPSCO		(12,790)
3	Central Office - Information Technology	Algonquin Power Trust	GEN IT FEE- LPSCO		(1,127)
4	Central Office - Operations	Algonquin Power Trust	GENERAL OPS		(1,146)
5	Central Office Fixed Overhead Costs	Algonquin Power Trust	MGMT FEE- LPSCO		(273,956)
6		• .			
7	RUCO Adj	ustment To Remove Un	necessary/Inappropriate Expenses	\$	(291,708)

Note: Descriptions above are per company journal entries in the general ledger.

#### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4c TO OUTSIDE SERVICES - OTHER

LINE					
NO.	DESCRIPTION	ACCOUNT	REFERENCE	<u>A</u>	MOUNT
1	Algonquin Water Resources	Meals and Entertainment		\$	(488)
2	Algonquin Water Resources	Meals and Entertainment	·		(19,123)
5	Algonquin Water Resources		DJ SERVICE - XMAS PARTY		(495)
6	Algonquin Water Resources		For Holiday Party Dec. 2008		(4,959)
7	Algonquin Water Resources		BALANCE DUE FOR 2008 XMAS PART		(953)
8	Algonquin Water Resources	Meals and Entertainment	2007 CAPITAL PRJECTS PLANNING		(211)
9	Algonquin Water Resources	Meals and Entertainment	Exp cost for the DBack game		(6,400)
10	Algonquin Water Resources	Meals and Entertainment	Catered lunch		(412)
11	Algonquin Water Resources	Licenses, Permits & Fees	FALSE ALARM FINE		(150)
12	Algonquin Water Resources	Licenses, Permits & Fees	FALSE ALARM FINE		(200)
13	Algonquin Water Resources	Licenses, Permits & Fees	Credit for Alarm Violation		250
14	Algonquin Water Resources	Dues & Memberships	HR Membership		(274)
15	Algonquin Water Resources	Dues & Memberships	TWC-FY08 DUES		(1,504)
16	Algonquin Water Resources	Dues & Memberships	TWC FY08 MBRSHIP DUES		(709)
17	Algonquin Water Resources	Dues & Memberships	r/c membership fee for 2008		1,378
18	Algonquin Water Resources	Dues & Memberships	r/c membership fee for 2008		650
19	Algonquin Water Resources	Dues & Memberships	MEMBERSHIP RENEWAL		(160)
20	Algonquin Water Resources	Dues & Memberships	MANAGEMENT PUBLICATIONS		(99)
21	Algonquin Water Resources	Dues & Memberships	Exp Tx Rual Water Assoc. Membe		(383)
22	Algonquin Water Resources	Dues & Memberships	Exp Tx Rual Wtr Assoc Membersh		(383)
23	Algonquin Water Resources	Dues & Memberships	exp Tx Rual Water Assoc Member		(383)
24					
25			Total Expenses	\$	(35,008)
26					
27			Water Division Allocation Factor		24.14%
28					
29	RUG	CO Adjustment To Remov	e Unnecessary/Inappropriate Expenses	\$	(8,451)

Note: Account names and references above are per Algonquin journal entries in its general ledger.

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## EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4d TO OUTSIDE SERVICES - OTHER

LINE				
NO.	GENERAL LEDGER ACCOUNT	VENDOR	DESCRIPTION	AMOUNT
1	Admin Allocation - AWS	Algonquin Water Se	ervices Recon fees to 4 factor	\$ (728,574)
2	Contractual Services-AWS	Algonquin Water Se	ervices Recon fees to 4 factor	265,541
3	Contractual Services-AWS	Algonquin Water Se	ervices Recon fees to 4 factor	309,859
4		• .		,
5				
6	RUCO Adjustment To	Remove Unneces	sary/Inappropriate Expenses	\$ (153,174)

Note: Descriptions above are per company journal entries in the general ledger.

Litchfield Park Service Company - Water Division Docket No. SW-01428A09-0103 Test Year Ended September 30, 2008

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# EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 5 TO WATER TESTING

 NO.	DESCRIPTION REFERENCE		AM	OUNT
1	QUALITY CRANE SERVICES, INC Invoice 30400		\$	(590)
2	•			
3	RUCO Adjustment to Remove Non-Recurring Ex	pense	\$	(590)

# EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 6 TO TRANSPORTATION EXPENSES

LINE NO.	DESCRIPTION	REFERENCE	A	MOUNT
1	Algonquin Water Services	Invoice SALES000000001019	\$	(19,364)
2	Algonquin Water Services	Invoice SALES000000001036		(4,938)
3				
4	RUCO Adjustment To Remove Unn	ecessary/Inappropriate Expenses	\$	(24,302)
5				
6	B&A Auto Repair	Invoice 3266	\$	(284)
7	DESERT GOLF CARS	Invoice 45331		(138)
8	•			, ,
9	RUCO Adjustment To Remove Exp	enses Outside of Test Year	\$	(422)
10				
11	Commonwealth Tow & Transport	Invoice 4389		(37)
12				,
13	RUCO Adjustment to Remove Non-	-Recurring Expense	\$	(37)
14	•			
15	TOTAL RUCO ADJUSTMENT 1	TO TRANSPORTATION EXPENSES	\$	(24,761)

# EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 8 TO MISCELLANEOUS EXPENSES

LINE NO.	DESCRIPTION	REFERENCE	Δ	MOUNT
		THE ETTERIOR		100111
1	10/3 Merchant Fees	JE 46993	\$	(2,195)
2	11/5 merchant fee	JE47338		(1,538)
3	1/3 Merchant Fees	JE48951		(862)
4	Merchant Fees	JE 49341		(14)
5	2/5 Merchant Fees	JE 49730		(982)
6	BANK & MERCHANT FEES	JE 50008		(1,109)
7	Merchant Fees	JE 50417		(1,072)
8	DISCOVER CARD FEES	JE 51126		(25)
9	MERCHANT FEES	JE 51127		(2,259)
10	Record Credit Card Fees	JE 51940		(2,201)
11	Record Monthly CC Fees	JE 53038		(2,501)
12	record monthly AMEX cr card fe	JE 54076		(6)
13	Record monthly credit card fee	JE 54077		(2,838)
14	record monthly credit card fee	JE 54663		(3,260)
15	Algonquin Power System	LABOR/TRAVEL/INSURANCE Invoice JC34077		(21)
16	Algonquin Water Services	PARTS/MEALS/GAS/MILGE/TELEPHON Invoice JC4258		(19)
17	Algonquin Water Services	MATERIAL/TRAVEL/TELEPHONE Invoice JC4457		(423)
18	Algonquin Water Services	MTRL/CONTRCTS/EQPMT/TRVL/TELE Invoice JC5243		(53)
19	Algonquin Water Services	PARTS/TRAVEL/TELEPHONE Invoice JC5435		(92)
20	Algonquin Water Services	PARTS/TRAVEL/CELLULAR Invoice JC6080		(15)
21	Algonquin Water Services	8600-0100-repairs Invoice JC6285		(204)
22				
23	RUCO Adjustment To Remove	Unnecessary/Inappropriate Expenses	\$	(21,689)
24				
25 26	Write off Unrec Variance		\$	(338)
27	write on office variance		Φ	(336)
28 29	RUCO Adjustment to Remove I	Non-Recurring Expense	\$	(338)
30	TOTAL R	RUCO ADJUSTMENT TO MISCELLANEOUS EXPENSES	\$	(22,027)

Note: Descriptions and references above are per company journal entries in the general ledger.

#### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 9a TO DEPRECIATION EXPENSE

LINE NO.	ACCT NO.	PLANT ACCOUNT		RUCO ORIGINAL COST	PROPOSED DEPR RATE		ROPOSED DEPR EXPENSE
			•	04.400	0.000/	•	
1	301	Organization	\$	21,100	0.00%	\$	-
2	302	Franchises		1 100 106	0.00%		-
4	303	Land and Land Rights		1,188,426	0.00% 3.33%		807,570
5	304	Structures and Improvements		24,251,352	3.33%		78,268
6 7	307	Wells and Springs		2,350,398 202,270	5.00%		10,114
8	310 311	Power Generation Equipment		790,650	12.50%		98,831
9	320	Electric Pumping Equipment Water Treatment Equipment		1,317,573	3.33%		43,875
9 10		Water Treatment Plants		1,866,965	3.33%		62,170
11		Chemical Solution Feeders		1,000,900	2.22%		02,170
12	330	Distribution Reservoirs & Standpipes		426,805	2.20%		9,390
13		Storage Tanks		420,000	2.20%		5,550
14		Pressure Tanks		_	5.00%		_
15	331	Transmission and Distribution Mains		28,911,123	2.00%		578,222
16	333	Services		4,191,784	3.33%		139,586
17	334	Meters		4,137,013	8.33%		344,613
18	335	Hydrants		2,054,522	2.00%		41,090
19	336	Backflow Prevention Devices		38,387	6.67%		2,560
20	339	Other Plant and Miscellaneous Equipment		260,106	6.67%		17,349
21	340	Office Furniture and Equipment		551,757	6.67%		36,802
22		Computers and Software		-	20.00%		-
23	341	Transportation Equipment		159,496	20.00%		31,899
24	342	Stores Equipment		31,711	4.00%		1,268
25	343	Tools, Shop, and Garage Equipment		23,351	5.00%		1,168
26	344	Laboratory Equipment		-	10.00%		-
27	345	Power Operated Equipment		_	5.00%		_
28	346	Communications Equipment		115,801	10.00%		11,580
29	347	Miscellaneous Equipment		-	10.00%		-
30	348	Other Tangible Plant		- -			_
31		, TOTAL	.s <del>-</del>	72,890,590		\$	2,316,357
32					-		
33		•					
34		Proposed	l Depr	eciation Expen	se Per RUCO	\$	2,316,357
35		·	•	•			
36		Less: Amortization of Contributions in	Aid of	Construction (	per Company)		(67,586)
37							
38		Total Proposed	l Depr	eciation Expen	se Per RUCO	\$	2,248,771
39		·	•				
40		Total Proposed De	epreci	ation Expense	Per Company	\$	2,291,982
41		• •		•	•		
42		Net I	Decre	ase to Deprecia	ation Expense	\$	(43,211)
43				-	-		
44		RUCO Adjustmen	t To F	Plant Deprecia	tion Expense	\$	(43,211)

## EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 9b TO DEPRECIATION EXPENSE

LINE NO.	DESCRIPTION	REFERENCE	19	99 Series Bonds (A)	20	01 Series Bonds (B)		Combined Total (A) + (B)
1	Aggregate Principal Balance of IDA Bonds		\$5	5,335,000	\$7	7,500,000	\$1	2,835,000
2	. Allowable Debt Issuance Cost	1999 & 2001 IDA Bond Contracts		2.00%		2.00%		
3		•						
4	Total Allowable Debt Issuance Cost	Line 1 X Line 2	\$	106,700	\$	150,000	\$	256,700
5	Term of Bond Issue, in Years	1999 & 2001 IDA Bond Contracts		24		30		
6	Term of Bond resues, in Tears	20114 20114 2015	_					
7	Annual Debt Issuance Amortization Expense	Line 4 / Line 5	\$	4,446	\$	5,000	\$	9,446
8	Cost Allocation Percentage to Water Division							50.00%
9								
10	Т	otal Amortization o	f D	ebt Discou	int F	Per RUCO	\$	4,723
11								
12	Test Year Ad	justed Amortization	n of	Debt Disc	our	nt As Filed	\$	11,465
13								
14	RUCO Adj	ustment To Amo	tiz	ation of D	ebt	Discount	\$	(6,742)
15	•							
16	TOTAL RUCO AD	JUSTMENT TO D	EP	RECIATIO	N	EXPENSE	\$	(6,742)

#### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 10 TO PROPERTY TAX

LINE NO.	DESCRIPTION	REFERENCE	(A)		(B)
1	Calculation Of The Company's Full Cash Value:				
2 3	Annual Operating Revenues:				
4	Year Ended 09/30/2008	Co. Sch E-2, Line 2	\$ 6,851,029		
5	Year Ended 09/30/2007	Co. Sch E-2, Line 2	6,749,901		
6	Year Ended 09/30/2006	Co. Sch E-2, Line 2	6,389,605		
7	Total Three Year Operating Revenues	Sum of Lines 4, 5, & 6	<del> </del>	-	
8	Average Annual Operating Revenues	-	\$ 6,663,512	=	
9	, wordigo , amada o porading no remaio	•		-	
10	Two Times Three Year Average Operating Revenues	Line 8 X 2		\$13	3,327,023
11					
12	ADD:				
13	10% of construction Work In Progress ("CWIP"):				
14	Test Year CWIP	Co. Sch E-1, Line 4	\$ (222,258)		
15	10% of CWIP	Line 14 X 10%		\$	(22,226)
16	,				
17	SUBTRACT:				
18	Transportation at Book Value:				
19	Original Cost of Transportation Equipment				
20	Accum. Depr. Of Transportation Equipment				
21	Book Value of Transportation Equipment	Line 19 + Line 20		\$	-
22					
23	Company's Full Cash Value ("FCV")	Sum of Lines 10, 15, & 21		13	3,304,798
24					
25	Calculation Of The Company's Tax Liability:				
26					
27	MULTIPLY:				
28	FCV X Valuation Assessment Ratio X Property Tax				
29	Assessment Ratio (2010)	House Bill 2779	22.5000%		
30	Assessed Value	Line 23 X 29	\$ 2,993,579		
- 31	•				
32	Property Tax Rates:		<b>=</b> 40500/		
33	Primary Tax Rate	JMM 1.50 - 2008 Budget			
34	Secondary Tax Rate	JMM 1.50 - 2008 Budget		-	
35	Estimated Tax Rate Liability	Line 33 + Line 34	11.1940%	)	
36				•	005 404
37	Company's Total Tax Liability - Based on Full Cash V	Line 30 X Line 35		\$	335,101
38		0. 0.1. 0.4 11. 00			272.054
39	Test Year Adjusted Property Tax Expense As Filed	Co. Sch. C-1, Line 28			373,354
40	Decrease in Property Tax Expense	Line 37 - Line 39		\$	(38,253)
41	TOT: -110	0 AD HIOTHENT TO 000		<del>-</del>	(20.052)
42	TOTAL RUCC	O ADJUSTMENT TO PRO	FERIT IAAES	<u> </u>	(38,253)

## EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 11 TO INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	(A) REFERENCE	(B) AMOUNT
	Decoral fron	KELLKENOL	711100111
1	FEDERAL INCOME TAXES:		
2			
3	Operating Income Before Taxes	Sch 4, Page 1, Col C, Lines 31 + 34	\$ 368,326
4	Less: '		
5	Arizona State Tax	Line 21	\$ 3,903
6	Interest Expense	Note (A), Line 35	(424,341)
7	Federal Taxable Income	Line 3 + Line 5 + Line 6	\$ (52,112)
8			
9	Federal Tax Rate	Schedule 1, Page 2 _	34.0000%
10	Federal Income Tax Expense	Line 7 X Line 9	\$ (17,718)
11		· · · · ·	
12	STATE INCOME TAXES:		
13			
14	Operating Income Before Taxes	Sch 4, Page 1, Col C, Lines 32 + 37	\$ 368,326
15	LESS:		
16	Interest Expense	Note (A), Line 35 _	(424,341)
17	State Taxable Income	Line 14 + Line 16	\$ (56,015)
18			
19	State Tax Rate	Tax Rate	6.9680%
20		_	
21	State Income Expense	Line 17 X Line 19 $_{\underline{\hspace{0.05cm}}}$	\$ (3,903)
22			
23	TOTAL INCOME TAX EXPENSE:		
24	Federal Income Tax Expense	Line 10	\$ (17,718)
25	State Income Tax Expense	Line 21	(3,903)
26	Total Income Tax Expense Per RUC	O Line 24 + Line 25	\$ (21,621)
27	Total Income Tax Expense Per Com	panyCompany Sch C-1	(449,717)
28	Total RUCO Income Tax Adjustm	nent Line 26 - Line 27	\$ 428,096
29			
30			
31	NOFE (A)		
32	Interest Synchronization:		
33	Adjusted Rate Base	\$ 37,222,878	
34	Weighted Avg. Cost of Debt	1.14%	
35	Synchronized Interest Expense (L33 X L34)	\$ 424,341	

#### **Water Bill Count Summary**

LINE			Company Present		RUCO Proposed		Increase/ Decrease)	Increase/ (Decrease)
NO.	Meter Size/Class		Rates		Rates	,	Amount	Percent
_140.	Wieter Olze/Olass		races		raice		7 11100111	1 0,00111
1	Residential						*	
2	5/8 inch meter	\$	7,865	\$	11,737	\$	3,872	49.23%
3	3/4 inch meter		2,015,346		2,955,672		940,326	46.66%
4	1 inch meter		1,980,115		3,393,468		1,413,353	71.38%
5	1.5 inch meter		53,017		99,093		<b>4</b> 6,076	86.91%
6	2 inch meter		173,915		305,411		131,496	75.61%
7	4 inch meter		19,356		30,621		11,265	58.20%
8	Subtotal Residential	\$	4,249,614	\$	6,796,003	\$	2,546,389	59.90%
9								
10	Commercial							
11	5/8 inch meter	\$	25,665	\$	52,136	\$	26,471	103.14%
12	3/4 inch meter		12,070		20,428		8,358	69.25%
13	1 inch meter		28,688		49,253		20,565	71.68%
14	1.5 inch meter		65,438		119,503		54,065	82.62%
15	2 inch meter		413,985		701,546		287,561	69.46%
16	4 inch meter		76,058		117,762		41,704	54.83%
17	8 inch meter		403,707		576,533		172,826	42.81%
18	10 inch meter		17,579		31,111		13,532	76.98%
19	Subtotal Commercial	\$	1,043,190	\$	1,668,272	\$	625,082	61.13%
20		•	, ,	•	, ,		ŕ	
21	Irrigation ·							
22	5/8 inch meter	\$	1,076	\$	2,433		1,357	126.09%
23	3/4 inch meter	•	36,882	•	74,860		37,978	102.97%
24	1 inch meter		153,062		284,781		131,719	86.06%
25	1.5 inch meter		156,419		301,284		144,865	92.61%
26	2 inch meter		895,159		1,333,216		438,057	48.94%
27	4 inch meter		104,340		157,617		53,277	51.06%
28	Subtotal Irrigation	\$	1,346,938	\$	2,154,191	\$	807,253	59.08%
29		•	-,,	•	_ <b>, ,</b> .	•	•	
30	Hydrant	\$	110,558	\$	176,809	\$	66,251	59.92%
	•	•	<b>,</b>		,	-	•	
31 32	Total Metered Revenue	\$	6,750,300	\$	10,795,274	\$	4,044,974	59.92%
32	I Otal Metered Reveilue	Ψ	0,730,300	Ψ	10,735,274	Ψ	7,077,314	JJ.JZ /0

#### PROPOSED RATES AND CHARGES

LINE NO.	DESCRIPTION	NTHLY NIMUM	PROPO CHARGI USAGE	ES AND
1 2 3 4 5 6	RESIDENTIAL CUSTOMERS 5/8-inch & 3/4-inch Meters First Tier - Zero to 5,000 Gallons Second Tier - Next 7,000 Gallons Third Tier - In Excess Of 12,000 Gallons	\$ 10.00	\$	1.000 1.944 3.500
7 8 9 10	1-inch Meters First Tier - First 50,000 Gallons Second Tier - In Excess Of 50,000 Gallons	\$ 25.00	\$	1.944 3.500
11 12 13 14	1.5-inch Meters First Tier - First 100,000 Gallons Second Tier - In Excess Of 100,000 Gallons	\$ 50.00	\$	1.944 3.500
15 16 17 18	2-inch Meters First Tier - First 100,000 Gallons Second Tier - In Excess Of 100,000 Gallons	\$ 80.00	\$	1.944 3.500
19 20 21 22	4-inch Meters First Tier - First 400,000 Gallons Second Tier - In Excess Of 400,000 Gallons	\$ 250.00	\$	1.944 3.500
23 24 25 26 27 28	COMMERCIAL CUSTOMERS 5/8-inch & 3/4-inch Meters First Tier - Zero to 5,000 Gallons Second Tier - Next 7,000 Gallons Third Tier - In Excess Of 12,000 Gallons	\$ 10.00	\$	1.000 1.944 3.500
29 30 31 32	1-inch Meters First Tier - First 50,000 Gallons Second Tier - In Excess Of 50,000 Gallons	\$ 25.00	\$	1.944 3.500
33 34 35 36	1.5-inch Meters First Tier - First 100,000 Gallons Second Tier - In Excess Of 100,000 Gallons	\$ 50.00	\$	1.944 3.500
37 38 39	2-inch Meters First Tier - First 100,000 Gallons Second Tier - In Excess Of 100,000 Gallons	\$ 80.00	\$	1.944 3.500

#### PROPOSED RATES AND CHARGES

			ONTHIN	PROPOSED CHARGES AND		
LINE			ONTHLY	USAGE		
NO.	DESCRIPTION	MINIMUM		USAGE	FEES	
40						
41	4-inch Meters	\$	250.00			
42	First Tier - First 400,000 Gallons			\$	1.944	
43	Second Tier - In Excess Of 400,000 Gallons				3.500	
44						
45	8-inch Meters	\$	760.00			
46	First Tier - First 500,000 Gallons			\$	1.850	
47	Second Tier - In Excess Of 500,000 Gallons				3.500	
48						
<b>4</b> 9	10-inch Meters	\$	1,000.00			
50	First Tier - First 600,000 Gallons			\$	1.850	
51	Second Tier - In Excess Of 600,000 Gallons				3.500	
52						
53	IRRIGATION CUSTOMERS					
54	5/8-inch & 3/4-inch Meters	\$	10.00			
55	First Tier - First 12,000 Gallons			\$	1.920	
56	Second Tier - In Excess Of 12,000 Gallons				3.679	
57		_				
58	1-inch Meters	\$	25.00			
59	First Tier - First 60,000 Gallons			\$	1.920	
60	Second Tier - In Excess Of 60,000 Gallons				3.679	
61		•	50.00			
62	1.5-inch Meters	\$	50.00	Ф	4.000	
63	First Tier - First 100,000 Gallons			\$	1.920	
64	Second Tier - In Excess Of 100,000 Gallons				3.679	
65	O in the Adapta se	•	90.00			
66	2-inch Meters	\$	80.00	\$	1.920	
67	First Tier - First 150,000 Gallons			Ф	3.679	
68	Second Tier - In Excess Of 150,000 Gallons				3.019	
69 70	4-inch Meters	\$	250.00			
71	First Tier - First 200,000 gallons	Ψ	250.00	\$	1.920	
72	Second Tier - In Excess Of 200,000 Gallons			Ψ	3.679	
73	Coolid Tiel - III Exocos Of 200,000 Callons				0.010	
74	Hydrant Rate	\$	160.20	\$	4.00	

#### Exhibit 2

#### **DIRECT TESTIMONY**

OF

SONN S. ROWELL, CPA

**Wastewater Division Schedules** 

Schedule 1 Page 1 of 1

#### Revenue Requirement

			(A)		(B)
			COMPANY		RUCO
LINE		C	CRB/FVRB	C	CRB/FVRB
NO.	DESCRIPTION		COST		COST
1 2	Adjusted Original Cost/Fair Value Rate Base	\$	28,296,903	\$	21,248,950
3 4	Adjusted Operating Income/(Loss)		163,778		528,810
5 6	Current Rate of Return (L3 / L1)		0.58%		2.49%
7 8	Required Operating Income (L9 X L1)	\$	3,228,677	\$	1,640,419
9 10	Required Rate of Return on Fair Value Rate Base		11.410%		7.720%
11 12	Operating Income Deficiency (L7 - L3)	\$	3,064,899	\$	1,111,609
13 14	Gross Revenue Conversion Factor (Schedule 1, Page 2)		1.6286		1.6286
15 16	Required Increase in Gross Revenue Requirement (L11 X L13	\$	4,991,601	\$	1,810,405
17 18	Adjusted Test Year Revenue	\$	6,356,374	\$	6,359,187
19 20	Proposed Annual Revenue (L15 + L17)	\$	11,347,975	\$	8,169,592
21 22	Required Percentage Increase in Revenue (L15 / L17)		78.53%		28.47%
23	Rate of Return on Common Equity		12.500%		8.010%

#### **GROSS REVENUE CONVERSION FACTOR**

LINE	DECORPTION	(4)	(B)		(C)	(D)
NO.	DESCRIPTION	(A)	(B)		(0)	
	CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000				
2	Combined Federal And State Tax Rate (Line 12)	(0.3860)				
3	Subtotal (Line 1 + Line 2)	0.6140	-			
	Revenue Conversion Factor (L1 / L3)	1.6286	1			
4	Nevenue Conversion Latest (EVV EC)	1.02.00	<u> </u>			
5 6	CALCULATION OF EFFECTIVE TAX RATE:					
7	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%				
8	Arizona State Income Tax Rate	6.9680%				
9	Federal Taxable Income (L7 - L8)	93.0320%	-			
10	Applicable Federal Income Tax Rate (Col. (D), L43)	34.0000%				
11	Effective Federal Income Tax Rate (L9 X L10)	31.6309%				
12	Combined Federal And State Income Tax Rate (L8 + L11)	38.5989%	_			
13	Combined Foundation Machine Functions (25 25)		=			
14	Required Operating Income (Sch1, Pg 1, Col. (B), L7)	\$ 1,640,419				
15	Adjusted T.Y. Oper'g Inc. (Loss) (Sch1, Pg 1, C (B), L3)	528,810				
16	Required Increase In Operating Income (L14 - L15)		\$1,111,609			
17	Trequired more about the operating moonte (21).		.,.,.			
18	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 878,945				
19	Income Taxes On Test Year Revenue (Col. (D), L40)	180,149				
20	Required Increase In Revenue To Provide For Income Taxes (L18		\$ 698,796			
21	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	A			
22	Total Required Increase In Revenue (L16 + L20)		\$1,810,405			
23	,				RUCO	
24	CALCULATION OF INCOME TAX:			REC	OMMENDED	
25	Revenue (Sch -1, Pg 1, Col. (B), L19)			\$	8,169,592	
26	Operating Expense Excluding Income Tax ( Sch4, Col. (E), L37	′ - L32)			5,650,228	
27	Synchronized Interest (Col. (C), L48)				242,238	
28	Arizona Taxable Income (L25 - L26 - L27)			\$	2,277,126	
29	Arizona State Income Tax Rate				6.9680%	
30	Arizona Income Tax (L28 X L29)					\$ 158,670
31	Fed. Taxable Income (L28 - L30)			\$	2,118, <b>45</b> 6	
32	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$	7,500	
33	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%				6,250	
34	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%				8,500	
35	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%				91,650	
36	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%				606,375	
37	Total Federal Income Tax (L32 + L33 + L34 + L35 + L36)					720,275
38	Combined Federal and State Income Tax (L30 + L37)					<b>\$</b> 878,945
39						
40	Test Year Combined Income Tax, RUCO as Adjusted ( Sch 4,	Col. (C), L32)			_	\$ 180,149
41	RUCO Adjustment To Proposed Inco	me Tax (L38 -	L40) (See So	ch 1, C	ol. (D), L32) _	\$ 698,796
42	•					
43	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)					34.00%
44						
45	CALCULATION OF INTEREST SYNCHRONIZATION:					
46	Rate Base			\$	21,248,950	
47	Weighted Avg. Cost of Debt				1.14%	
48	Synchronized Interest (L35 X L36)			\$	242,238	

# RATE BASE - ORIGINAL COST

NO.	,	O \ Ŏ	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO AĎJMT No. 1	(C) RUCO ADJM'T No. 2	∢	(D) RUCO ADJM'T No. 3	4 00	(E) RUCO ADJ'TED OCRB/FVRB
~	Gross Utility Plant in Service	<del>ω</del>	60,394,260	\$(6,693,440)	ř-			<del>69</del>	53.700.820
7									
ω 4	Accumulated Depreciation		(8,475,991)	291,308					(8,184,683)
. r	Net Utility Plant in Service (Sum L1 & L3)	ક્ક	51,918,269	\$(6,402,132)	ا ب	S	i	es	45.516.137
9									
7	Less:								
œ	Advances in Aid Of Construction	₩	(7,006,208)					↔	(7,006,208)
တ									
10	Contribution in Aid of Const.	↔	(18,737,132)			43	(287,670)	Ī	(19,334,802)
<del>-</del>	Accumulated Amortization of CIAC		2,072,117						2.072.117
12	NET CIAC (L10 + L11)	છ	(16,665,015)	-	5	8	(597,670)	8	(17,262,685)
13									(
7	Customer Meter Deposits	₩	(68,685)					G	(68,685)
5	Deferred Income Tax		(15,987)						(15,987)
9									1
17	Plus:								ı
9	Unamortized Debt Issuance Costs	↔	134,528	•	\$ (48,150)				86.378
19									) ; '
20									1
21									ı
22	TOTAL RATE BASE (Sum Lines's 5,8,12-19)	<del>⇔</del>	28,296,902	\$(6,402,132)	\$ (48,150)	क	(597,670)	<del>ss</del>	21,248,950

# References:

Column (A): Company Schedule B-1

Column (B): RUCO Schedule 2, Page 2
Column (C): RUCO Schedule 2, Page 3
Column (D): RUCO Schedule 2, Page 4
Column (E): Sums of Column (A) through Column (D)

#### EXPLANATION OF RATE BASE ADJUSTMENT NO. 1 TO UTILITY PLANT IN SERVICE

LINE NO.	DESCRIPTION	AMOUNT	REFERENCE
1	RUCO Proposed Utility Plant In Service At End of Test Year	\$ 53,700,820	RUCO Schedule 3, Page 1
2	,		
3	Company Proposed Utility Plant In Service At End of Test Year	60,394,260	Company Schedule B-1
4	_		•
5	RUCO Proposed Adjustment To Utility Plant in Service	\$ (6,693,440)	<u> </u>
6			
7			
8	Accumulated Depreciation At End of Prior Test Year	\$ 1,261,559	Amount Per RUCO TJC-2
9	2001 Depreciation Expense	263,975	
10	2002 Depreciation Expense	450,920	
11	2003 Depreciation Expense	951,378	
12	2004 Depreciation Expense	1,029,280	
13	2005 Depreciation Expense	1,176,009	
14	2006 Depreciation Expense	1,292,454	
15	2007 Depreciation Expense	1,373,687	
16	2008 Depreciation Expense (9 months)	1,166,295	_
17	· Subtotal	\$ 8,965,557	Sum of Lines 16 through 19
18			
19	Less 2002 Retirements	\$ (780,874)	
20	_		_
21	RUCO Proposed Accumulated Depreciation At End of Test Year	\$ 8,184,683	Sum of Lines 17, 19, and 20
22			
23	Company Proposed Accumulated Depreciation At End of Test Year	\$ 8,475,991	Company Schedule B-1
24	_		_
25	RUCO Proposed Adjustment To Accumulated Depreciation	\$ (291,308)	Line 22 - Line 24

#### EXPLANATION OF RATE BASE ADJUSTMENT NO. 2 TO UNAMORTIZED DEBT ISSUANCE COSTS

Line No.	Description	1	(A) 999 Series Bonds	2	(B) 001 Series Bonds	(C) Combined Total (A) + (B)
1 2	Aggregate Principal Balance of IDA Bonds Allowable Debt Issuance Cost as per 1999 & 2001 IDA Bond Contracts	\$	5,335,000 2.00%	\$	7,500,000 2.00%	\$ 12,835,000
3 4 5	Total Allowable Debt Issuance Cost (L1 X L2) Term of Bond Issue, in Years	\$	106,700 24	\$	150,000 30	\$ 256,700
6 7 8	Annual Debt Issuance Amortization Expense - Straight Line (L4 / L5) Number of Months in Year	\$	4,446 12	\$	5,000 12	\$ 9,446
9 10 11	Allowable Monthly Amortization Expense (L7 / L8) Months Remaining before the Bonds Reach Maturity*	\$	370 168	\$	417 264	\$ 787
12 13 14	Unamortized Debt Issuance Costs RUCO as Adjusted (L10 X L11)	\$	62,242	\$	110,000	\$ 172,242
15 16 17	Unamortized Debt Issuance Costs Company as Filed	\$	141,268	\$	127,274	\$ 268,542
18 19	Unamortized Debt Issuance costs RUCO as Adjusted		62,242		110,000	172,242
20 21	Decrease to Unamortized Debt Issuance Costs	\$	(79,027)	\$	(17,274)	\$ (96,301)
22 23	Wastewater	Divis	ion Cost Allo	cat	tion Percent	50.00%
23 24	RUCO Unamortized Debt Issuand	ce co	sts - Wastev	vat	ter Division	\$ (48,150)

<sup>\*</sup> Information on the months remaining before the bonds reach maturity was provided in the Company's response to Staff Data Request JMM 1.32, with the 1999 Series IDA Bonds maturing October 1, 2023, and the 2001 Series IDA Bonds Maturing October 1, 2031.

# EXPLANATION OF RATE BASE ADJUSTMENT NO. 3 TO CONTRIBUTIONS IN AID OF CONSTRUCTION

LINE NO.		REFERENCE
1	.  CIAC Balance Per Application 18,737,132 Company 9	Schedule B-2 Page 2
2		
3	CIAC Balance Per Response to Staff Data Request 19,334,802 Company F	Response to JMM 1.27
4		
5	Increase to CIAC <u>\$ 597,670</u> Line 3 - Li	ne 1
6		
7	RUCO Proposed Adjustment To CIAC Balance \$ 597,670 Line 5	

#### TEST YEAR PLANT SCHEDULE YEAR ENDED SEPTEMBER 30, 2008

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) COMPANY DJ TEST YR	ΑD	(B) RUCO JUSTMENTS	Rl	(C) JCO PLANT VALUE
1	351	Organization	\$ -	\$	-	\$	-
2	353	Land and Land Rights	1,783,426		-		1,783,426
3	354	Structures and Improvements	19,319,421		(4,267,451)		15,051,970
4	355	Power Generation Equipment	543,670		5,004		548,674
5	360	Collection Sewers - Force	1,161,105		(164,647)		996,458
6	361	Collection Sewers - Gravity	23,113,391		(1,795,760)		21,317,631
7	362	Special Collecting Structures			-		-
8	363	Customer Services			~		-
9	364	Flow Measuring Devices	47,019		(412)		46,607
10	366	Reuse Services	3,789,468		(1,249)		3,788,219
11	367	Reuse Meters and Installation	52,331		~		52,331
12	370	Receiving Wells	860,393		~		860,393
13	371	Pumping Equipment	1,858,411		(284,996)		1,573,415
14	374	Reuse Distribution Reservoirs	62,825		-		62,825
15	375	Reuse Trans. And Distrib. System	414,315		(73,638)		340,677
16	380	Treatment and Disposal Equipment	5,469,478		(63,807)		5,405,671
17	381	Plant Sewers	47,786		(178)		47,608
18	382	Outfall Sewer Lines	343,681		-		343,681
19	389	Other Plant and Miscellaneous Equipment	644,609		(41,454)		603,155
20	390	Office Furniture and Equipment	198,772		-		198,772
21	391	Transportation Equipment	26,078		-		26,078
22	392	Stores Equipment	8,968		-		8,968
23	393	Tools, Shop, and Garage Equipment	56,167		-		56,167
24	394	Laboratory Equipment	173,948		-		173,948
25	396	Communications Equipment	418,996		(4,850)		414,146
26	398	Other Tangible Plant	_		-		-
27		<del>v</del>					
28		TOTAL WASTEWATER PLANT	\$ 60,394,258	\$	(6,693 <u>,</u> 438)	\$	53,700,820

Litchfield Park Service Company - Wastewater Division Docket No. SW-01428-09-0103 and W-01427A-09-0104 Test Year Ended September 30, 2008

5 5	UNT NAME	COMPANY AS FILED	RUCO ADJ 1	RUCO ADJ 2	RUCO ADJ 3	RUCO ADJ 4	RUCO ADJ 5	RUCO ADJ 6	RUCO ADJ 7	RUCO ADJ 8	TOTAL PG 1 ADJ
Orga Land	Organization \$ Land	1.783.426									' ' •
ξ	Structures & Improvements	19,482,740		\$ (36,500)	\$ (348,603) \$	(83,652)			\$ 3,725		(465,030)
ď	Power Generation	543,670						\$ 5,004			5,004
ပိ	Collection Sewer Forced	1,180,730									ı
රි	Collection Sewers Gravity	23,517,829	\$ (1,230,049)		(7,527) \$	(1,203)					(1,238,779)
β	Special Collecting Structures	ı									
ರ	Customer Services	•									ľ
Ĭ	Flow Measuring Devices	47,360									
æ	Reuse Services	3,791,018									,
ď	Reuse Meters and Installation	52,331									•
ď	Receiving Wells	860,393									•
ā	Pumping Equipment	1,872,539			(91,921)	(12,071)		\$ 1,530	\$ 4.864	\$ (136,488)	(234,086)
œ	Reuse Distribution Reservoirs	62,625									1
œ	Reuse Trans, and Dist. System	414,315									•
-	Treatment & Disposal Equip.	5,487,661				-,	\$ (38,625)				(38,625)
<u>а</u>	Plant Sewers	48,010									
O	Outfall Sewer Lines	343,681									ı
O	Other Sewer Plant & Equip.	673,896						\$ 2,000			2,000
O	Office Furniture & Equipment	198,772									
⊢	Transportation Equipment	26,078									•
ÇŲ	Stores Equipment	8,967									1
<b>-</b>	Tools, Shop And Garage Equip	56,167									
_	aboratory Equip	173,948									•
U	Communication Equip	418,996									
U	Other Tangible Plant	ı									1
	TOTALS \$	61,045,153	\$ (1,230,049)	\$ (36,500)	\$ (448,051) \$	(96,926)	\$ (38,625)	\$ 8,534	\$ 8,589	\$ (136,488)	\$ (1,969,516)
ADJ1 A	Adiust for differences in beginning plant balances.	plant balances									
	Disallow costs of 2004 PACE Report.	oort.									
	Record abandonment of Wigwam and Bullard lift stations in July of 2002	and Bullard lift	vlul, ni suoitets	of 2002.							
	Record abandonment of 1 itchfield Greens lift stations in September of 2007.	Greens lift stat	ions in Septemb	ner of 2007							
	Remove water treatment plant transferred to Black Mountain Sewer Company in 2008.	nsferred to Blac	k Mountain Sev	ver Company	in 2008.						
_	Capitalize test year expenses in 2007 from Loftin	.007 from Loftin	Equipment, Pre	scision Electri	Equipment, Precision Electric, and KEOGH Engineering.	Engineering					
	Capitalize test year expenses in 2008 from Precision Electric and Dean Fence & Gate.	008 from Precis	sion Electric and	Dean Fence	& Gate.						
ADJ8 RE	Reclassify Repair invoices from Precision Electric	recision Electri		Contractual	during 2008 to Contractual Services - Other.	<u></u>					

Litchfield Park Service Company - Wastewater Division Docket No. SW-01428-09-0103 and W-01427A-09-0104 Test Year Ended September 30, 2008

TOTAL PG 2 ADJ	1	- 67 126	2 .	(32,209)	(47,860)	ı	ı	(412)	1.551		1	(46.697)	(:>>!	1	14 323	222	777	2000	7,080	1	ı		•	ī	1	ı	144 7000	(41,550)			920							
RUCO ADJ 16 PO	•	(40 684)		(21,550)	(327,018)			(753)				(25.638)	(======		(1.860)	(2)		(3.750)	(00,1,0)											om 2007 The	om 2001: The	מלאס בו מספים						
RUCO ADJ 15		\$ (55.508) \$	(22)	(30,284)	(125,280)							(1,300)			(2.000)	(1)		(03 200)	(50,500)								# /207 CCC/	\$ (231,201) \$ (421,253) \$		epair invoice fr	vear and not in	ממי, מומיוסר וו						
RUCO ADJ 14		\$ 58.210		154	36,779				886			1.174			111	222	1	14 508	)								¢ 140 040			e Precision re	side the test							
RUCO ADJ 13		\$ 57.739			102,212				999			70			11,615			1 357	) ) :								¢ 172 659	000'0		r. and remov	9 196) is our	200					Zice.	vice.
RUCO ADJ 12	•	\$ 1.378		268	78,415							568			4,522			443	)								\$ BE EDA			rvices - Othe	e second (\$1	· · · · · · · · · · · · · · · · · · ·					placed in ser	placed in ser
RUCO ADJ 11		14,187		7,843	135,919			341				11,712			872			1715									177 580	600,303		ontractual Se	nse, while th						elated asset	elated asset
RUCO ADJ 10		\$ 31,804 \$		11,360	51,113							604			1,063			11.334									\$ 407.078 ¢			Electric during 2007 to Contractual Services - Other, and remove Precision repair invoice from 2007 The	udable in expe	ĮĮ,	fit	: #	<b>:</b> #	: #	stimated year r	costs by estimated year related asset placed in service.
RUCO ADJ 9												\$ (33,887)															(738 87)	(100,00)			t vear and incl	04 Affiliate Profit		Affiliate	7 Affiliate Profit		bor costs by e	bor costs by ea
ACCOUNT NAME	Organization ·	Structures & Improvements	Power Generation	Collection Sewer Forced	Collection Sewers Gravity	Special Collecting Structures	Customer services	Flow Measuring Devices	Reuse Services	Reuse Meters and Installation	Receiving Wells	Pumping Equipment	Reuse Distribution Reservoirs	Reuse Trans, and Dist. System	Treatment & Disposal Equip.	Plant Sewers	Outfall Sewer Lines	Other Sewer Plant & Fauin	Office Furniture & Equipment	Transportation Equipment	Stores Equipment	Tools, Shop And Garage Equip	Laboratory Equip	Communication Fouring	Other Tangible Plant		S IATOT			Reclassify Repair invoice from Precision	first invoice (\$14.691) is within the test year and includable in expense, while the second (\$19.196) is outside the test year, and not included in expense			Reverse Company Adjustment for 2006	Reverse Company Adjustment for 2007	Reverse Company Adjustment for 2008	Remove 2004 unsupported affiliate labor costs by estimated year related asset placed in service.	Remove 2005 unsupported affiliate labor
ACCT. NO.	351 353	354	355	360	361	362	353	364	366	367	370	371	374	375	380	381	382	389	390	391	392	393	394	396	308					ADJ 9		ADJ 10	ADJ 11	AD.1 12	AD.1 13	ADJ 14	ADJ 15	ADJ 16
LINE NO.	- 2	က	4	ۍ <del>د</del>	1 C	~ o	o o	თ (	9	~	12	13	14	15	16	17	18	6	20	21	22	23	24	25	26	27	2 6	2 6	300	34	32	33	34	35	36	37	38	39

Litchfield Park Service Company - Wastewater Division Docket No. SW-01428-09-0103 and W-01427A-09-0104 Test Year Ended September 30, 2008

LINE NO.	ACCT. NO.	ACCOUNT NAME	RUCO ADJ 17	RUCO ADJ 18	RUCO ADJ 19	RUCO ADJ 20	TOTAL PG 3 ADJ	TOTAL ALL ADJS
. —	351	Organization					ι <del>()</del>	' <del>ω</del>
0 m	353 354	Land Structures & Improvements	\$ (7,035)	0,	\$ (362,512)	\$ (3,500,000)	(3,869,547)	(4,267,451)
4	355	Power Generation					l .	5,004
5	360	Collection Sewer Forced	(131,238)		(1,200)		(132,438)	(164,647)
9	361	Collection Sewers Gravity	(162,996)	\$ (288,769)	(57,356)		(509,121)	(1,795,760)
7	362	Special Collecting Structures					ı	ı
œ	363	Customer Services					1	
တ	364	Flow Measuring Devices						(412)
10	366	Reuse Services		(1,200)	(1,600)		(2,800)	(1,249)
7	367	Reuse Meters and Installation						ı
12	370	Receiving Wells						•
13	371	Pumping Equipment	(1,200)	(200)	(2,813)		(4,213)	(284,996)
4	374	Reuse Distribution Reservoirs					1	t
15	375	Reuse Trans. and Dist. System			(73,638)		(73,638)	(73,638)
16	380	Treatment & Disposal Equip.	(8,756)	(30,549)	(200)		(39,505)	(63,807)
17	381	Plant Sewers			(400)		(400)	(178)
48	382	Outfall Sewer Lines					•	ŧ
19	389	Other Sewer Plant & Equip.	(800)	(2,450)	(42,600)		(45,850)	(41,454)
20	390	Office Furniture & Equipment					ı	,
21	391	Transportation Equipment						ı
22	392	Stores Equipment					ı	
23	393	Tools, Shop And Garage Equip					1	ı
24	394	Laboratory Equip					1	•
25	396	Communication Equip			(4,850)		(4,850)	(4,850)
56	398	Other Tangible Plant					•	•
27				- 1	- 1			
28		TOTALS	<b>TOTALS</b> \$ (312,025)	\$ (323,168)	\$ (547,169)	\$ (3,500,000)	\$ (4,682,362)	\$ (6,693,438)
29								
30								
31	ADJ 17	Remove 2006 unsupported affiliate labor costs by estimated year related asset placed in service.	bor costs by e	stimated year i	elated asset p	placed in servic	ej.	
32	ADJ 18	Remove 2007 unsupported affiliate labor costs by estimated year related asset blaced in service.	bor costs by e	stimated year i	elated asset p	olaced in servic	avi a	
5, 6, 5, 6,	AD3 18	Remove zooo unsupported armate labor costs by estimated year related associpation; in sortice.  Benevie costs associated with correcting design deficiencies at the PVWRF at 50% of amount incurred and placed in	bol costs by e ing design de:	sumated year i	PVWRF at 5	olaced in services to the services of the serv	incurred and bla	iced in
35	200	service during the Test Year per direct testimony of Greg Sorensen at page 7.	t testimony of	Greg Sorense	n at page 7.			

#### **OPERATING INCOME**

		(A)		(B)			(C)		(D)		(E)
		COMPANY		RÙĆO		RI	JCO TEST		RUCO		RUCO
LINE		AS	TE	ST YEAR		•	YEAR AS	PR	OPOSED		AS
NO.	DESCRIPTION	FILED	AD	JUSTMENTS	REF	Α	DJUSTED	C	HANGES	R	ECOMM'D
										-	
1	Revenues										
2	Flat Rate Revenues	\$ 6,164,589				\$	6,164,589	\$	1,471,507	\$	7,636,096
3	Measured Revenues	92,030		2,813	1		94,843		338,898		433,741
4	Other Wastewater Revenues	99,755					99,755				99,755
5							-				
6	TOTAL OPERATING REVENUE	\$ 6,356,374	\$	2,813		\$	6,359,187	\$	1,810,405	\$	8,169,592
7											
8	Operating Expenses										
9	Salaries & Wages	\$ -				\$	-			\$	-
10	Purchased Wastewater Treatment	1,205					1,205				1,205
11	Sludge Removal Expense	267,554					267,554				267,554
12	Purchased Power	632,064		(406)	2/3		631,658				631,658
13	Fuel for Power Production	2,076		(425)	2		1,651				1,651
14	Chemicals	279,749		(12,089)	3		267,660				267,660
15	Materials and Supplies	75,579		(13,520)	8		62,059				62,059
16	Contractual Services	3,117					3,117				3,117
17	Contractual Services - Testing	33,348		(6,398)	5		26,951				26,951
18	Contractual Services - Other	2,716,000		(222, 124)	4а-е		2,493,876				2,493,876
19	Contractual Services - Legal	24,084					24,084				24,084
20	Equipment Rental	78,309		(4,387)	7		73,922				73,922
21	Rents - Building	18,976					18,976				18,976
22	Transportation Expenses	69,551		(17,726)	6		51,825				51,825
23	Insurance - General Liability	32,133					32,133				32,133
24	Insurance - Vehicle	2,213					2,213				2,213
25	Regulatory Comm, Expense	19,133					19,133				19,133
26	Regulatory Comm, Exp Rate Case	70,000		(20,000)	14		50,000				50,000
27	Miscellaneous Expense	36,656		(6,409)	9		30,247				30,247
28	Bad Debt Expense	43,889		(40,848)	10		3,041				3,041
29	Depreciation & Amortization	1,550,237		(234,980)	11a-b		1,315,257				1,315,257
30	Taxes Other Than Income	<del>-</del>					-				-
31	Property Taxes	336,629		(62,962)	12		273,667				273,667
32	Income Tax	(99,906)		280,055	13		180,149		698,796		878,945
33							-				-
34											
35	TOTAL OPERATING EXPENSES	\$ 6,192,596	\$	(362,219)		\$	5,830,377	\$	698,796	\$	6,529,173
36	_										
37	OPERATING INCOME (LOSS)	\$ 163,778	\$	365,032		\$	528,810	\$	1,111,608	\$	1,640,419

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#### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 1 TO MEASURED REVENUES

LINE NO.	DESCRIPTION	AMOUNT	REFERENCE
1 2	Company Test Year Effluent Revenue per data Response	\$ 94,843	RUCO MJR 2.19 and 2.20
3	Company Test Year Effluent Revenue per Application	92,030	Schedule C-1
5	RUCO Adjustment to Increase Test Year Effluent Revenue	\$ 2,813	- =

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## EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 2 TO FUEL FOR POWER PRODUCTION

LINE NO.		DESCRIPTION REFERENCE		AM	OUNT
1	APS	MAY08-342122282		\$	(425)
~			-		
3		RUCO Adjustment to Move Expense to Purchased F	Power	\$	(425)

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## EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 3 TO CHEMICALS

LINE NO.	DESCRIPTION	DEFEDENCE	^	MOUNT
NO.	DESCRIPTION	REFERENCE	_ <u>A</u>	MOUNT_
1	HILL BROTHERS CHEMICAL CO.	nvoice No. 04293182	\$	(891)
2	HILL BROTHERS CHEMICAL CO.	nvoice No. 04293614		(267)
3	HILL BROTHERS CHEMICAL CO.	nvoice No. 04293602		(2,226)
4	Ashland Specialty	nvoice No. 2500042992		(9,618)
5				
6	RUCO Adjustment To Remove Exp	enses Outside of Test Year	\$	(13,002)
7		- -		
8				
9	HILL BROTHERS CHEMICAL CO. II	nvoice No. 04305583	\$	831
10				
11	RUCO Adjustment To Move Expe	nse from Purchased Power	\$	831
12		-		
13	RUCO Adjustment to Con	npany Annualized Chemicals	\$	82
14	,			
15	TOTAL RUCO ADJ	IUSTMENT TO CHEMICALS	\$	(12,089)

#### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4a TO CONTRACTUAL SERVICES - OTHER

LINE			
NO.	DESCRIPTION REFERENCE	<i>F</i>	MOUNT
1 2 3 4 5 6	Loftin Equipment Co. (Generator duct fabricated & installed) Precision Electric Co. (Install rebuilt pump) Invoice No. 0752086 (Dec. 32, 2007) Precision Electric Co. (New reinforced strainer baskets installed Invoice No. 1-049159 (Mar. 20, 2008) Dean Fence & Gate (Fence fabricated and installed) Invoice No. 109347 (Jan. 11, 2008) KEOGH Engineering (Odor monitor - site plan and pole mount) Invoice No. 22477 (Oct. 9, 2007) KEOGH Engineering (Odor monitor - legal description and map) Invoice No. 22637 (Dec. 6, 2007)	\$	(5,004) (1,530) (4,864) (3,725) (1,450) (550)
7			
8 9 10	RUCO Adjustment To Remove Expenses To Be Capitalized	\$	(17,124)
11 12 13 14	Keller Equipment Co. (Filter System Repair)  Keller Equipment Co. (Work on UV System)  Yahweh Contracting, LLC (Remove Sewer Lift Station)  Invoice No. 0167123-IN (Sept. 14, 200 Invoice No. 0167341-IN (Sept. 19, 200 Invoice No. 1 (September 21, 2007)		(8,054) (525) (8,003)
15 16 17	RUCO Adjustment To Remove Expenses Outside of Test Year	\$	(16,582)
18 19	SunCor Farms (Effluent Clean Up and Oat Crop Planting) Invoice No. 093007LPSCO (Oct. 3, 20	)07) \$	(19,784)
20 21 22	RUCO Adjustment to Remove Non-Recurring Expenses	\$	(19,784)
23 24 25	GreensKeeper, LLC (Remove weeds at LPSCO Farm)  Pro-Tech Environmental (Clean Sewer Lines in Gilbert, AZ)  Invoice No. 4340 (Oct. 18, 2007)  Invoice No. 08012201 (Jan. 25, 2008)	\$	(11,500) (4,928)
26 27 28	RUCO Adjustment To Remove Unnecessary/Inappropriate Expenses	\$	(16,428)
29 30 31	Thomas J. Bourassa, CPA (Professional Service)  Thomas J. Bourassa, CPA (Rate Review - Water and Sewer)  Invoice No. 1000002402 (Dec 10, 200 Invoice No. 1000002413 (Feb 5, 2008))	•	(155) (981)
32 33 34	RUCO Adjustment to Remove Expenses Included in Estimated Rate Case Expense	\$	(1,136)
35	, TOTAL RUCO ADJUSTMENT TO OUTSIDE SERVICES - OTH	ER	(71,054)

#### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4b TO CONTRACTUAL SERVICES - OTHER AND ADMINISTRATIVE ALLOCATION - AWS

LINE				
NO.	GENERAL LEDGER ACCOUNT	VENDOR	DESCRIPTION	AMOUNT
1	Contractual Services-AWS	Algonquin Water Services	Recon fees to 4 factor	\$ 177,028
2	Contractual Services-AWS	Algonquin Water Services	Recon fees to 4 factor	206,573
3	Admin Allocation-AWS	Algonquin Water Services	Recon fees to 4 factor	(485,716)
4				
5			,	¢ (402.44¢)
6	RUCO	Adjustment To Remove Un	necessary/Inappropriate Expense	es <u>\$ (102,116)</u>

### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4c TO CONTRACTUAL SERVICES - OTHER

LINE				
NO.	GENERAL LEDGER ACCOUNT	VENDOR	DESCRIPTION	AMOUNT
1	Central Office - Accounting/Administration	Algonquin Power Trust	GENERAL ACCTIN FEE - LPSCO	\$ (1,793)
2	Central Office - Human Resources	Algonquin Power Trust	GEN HR FEE- LPSCO	(6,138)
3	Central Office - Information Technology	Algonquin Power Trust	GEN IT FEE- LPSCO	(518)
4	Central Office - Operations	Algonquin Power Trust	GENERAL OPS	(764)
5	Central Office Fixed Overhead Costs	Algonquin Power Trust	MGMT FEE- LPSCO	(182,637)
6				·
7	RUCO Adi	iustment To Remove Un	necessary/Inappropriate Expenses	\$ (191,850)

#### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4d TO CONTRACTUAL SERVICES - OTHER

LINE					
NO.	DESCRIPTION	ACCOUNT	REFERENCE	AN	MOUNT
1	Algonquin Water Resources	Meals and Entertainment	MISC. SUPPLIES	\$	(488)
2	Algonquin Water Resources	Meals and Entertainment			(19,123)
5	Algonquin Water Resources	Meals and Entertainment	DJ SERVICE - XMAS PARTY		(495)
6	Algonquin Water Resources		For Holiday Party Dec. 2008		(4,959)
7	Algonquin Water Resources	Meals and Entertainment	BALANCE DUE FOR 2008 XMAS PART		(953)
8	Algonquin Water Resources	Meals and Entertainment	2007 CAPITAL PRJECTS PLANNING		(211)
9	Algonquin Water Resources	Meals and Entertainment	Exp cost for the DBack game		(6,400)
10	Algonquin Water Resources	Meals and Entertainment	Catered lunch		(412)
11	Algonquin Water Resources	Licenses, Permits & Fees	FALSE ALARM FINE		(150)
12	Algonquin Water Resources	Licenses, Permits & Fees	FALSE ALARM FINE		(200)
13	Algonquin Water Resources	Licenses, Permits & Fees	Credit for Alarm Violation		250
14	Algonquin Water Resources	Dues & Memberships	HR Membership		(274)
15	Algonquin Water Resources	Dues & Memberships	TWC-FY08 DUES		(1,504)
16	Algonquin Water Resources	Dues & Memberships	TWC FY08 MBRSHIP DUES		(709)
17	Algonquin Water Resources	Dues & Memberships	r/c membership fee for 2008		1,378
18	Algonquin Water Resources	Dues & Memberships	r/c membership fee for 2008		650
19	Algonquin Water Resources	Dues & Memberships	MEMBERSHIP RENEWAL		(160)
20	Algonquin Water Resources	Dues & Memberships	MANAGEMENT PUBLICATIONS		(99)
21	Algonquin Water Resources	Dues & Memberships	Exp Tx Rual Water Assoc. Membe		(383)
22	Algonquin Water Resources	Dues & Memberships	Exp Tx Rual Wtr Assoc Membersh		(383)
23	Algonquin Water Resources	Dues & Memberships	exp Tx Rual Water Assoc Member		(383)
24					
25			Total Expenses	\$	(35,008)
26			·		
27			Wastewater Division Allocation Factor		23.66%
28					
29	, RUG	CO Adjustment To Remov	e Unnecessary/Inappropriate Expenses	\$	(8,283)

Note: Account names and references above are per Algonquin journal entries in its general ledger.

## EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4e TO CONTRACTUAL SERVICES - OTHER

LINE				
NO.	DESCRIPTION	REFERENCE	A۱	TNUON
1	Precision Electric Co., Inc.	Invoice 1-048214 \$	;	14,691
2	Precision Electric Co., Inc.	Invoice 1-048528		23,931
5	Precision Electric Co., Inc.	Invoice 1-049514A		25,391
6	Precision Electric Co., Inc.	Invoice 1 -050074		14,862
7	Precision Electric Co., Inc.	Invoice 1-050769		1,239
8	Precision Electric Co., Inc.	Invoice 1 -050812		19,924
9	Precision Electric Co., Inc.	Invoice 1 -050929		28,289
10	Precision Electric Co., Inc.	Invoice 1-051517		7,826
11	Precision Electric Co., Inc.	Invoice 1-050563		15,026
12	·			
13	Reclassified from Acc	ount 371 for Repairs During the Test Year 🥞	<b>S</b>	151,179

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# EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 5 TO CONTRACTUAL SERVICES - TESTING

LINE			
NO.	DESCRIPTION	REFERENCE	AMOUNT
1	LEGEND TECHNICAL SERVICES	Invoice No. 0714659	\$ (28.00)
2	LEGEND TECHNICAL SERVICES	Invoice No. 0714650	(28.00)
3	LEGEND TECHNICAL SERVICES	Invoice No. 0714652	(28.00)
4	LEGEND TECHNICAL SERVICES	Invoice No. 0714647	(28.00)
5	LEGEND TECHNICAL SERVICES	Invoice No. 0714641	(28.00)
6	LEGEND TECHNICAL SERVICES	Invoice No. 0714630	(28.00)
7	LEGEND TECHNICAL SERVICES	Invoice No. 0714601	(252.80)
8	LEGEND TECHNICAL SERVICES	Invoice No. 0714602	(96.00)
9	LEGEND TECHNICAL SERVICES	Invoice No. 0714676	(497.60)
10	LEGEND TECHNICAL SERVICES	Invoice No. 0714665	(28.00)
- 11	LEGEND TECHNICAL SERVICES	Invoice No. 0714621	(28.00)
12	LEGEND TECHNICAL SERVICES	Invoice No. 0714918	(28.00)
13	LEGEND TECHNICAL SERVICES	Invoice No. 0714916	(28.00)
14	LEGEND TECHNICAL SERVICES	Invoice No. 0714901	(28.00)
15	LEGEND TECHNICAL SERVICES	Invoice No. 0714907	(28.00)
16	LEGEND TECHNICAL SERVICES	Invoice No. 0714896	(28.00)
17	LEGEND TECHNICAL SERVICES	Invoice No. 0712007	(68.00)
18	LEGEND TECHNICAL SERVICES	Invoice No. 0711989	(68.00)
19	LEGEND TECHNICAL SERVICES	Invoice No. 0711986	(68.00)
20	LEGEND TECHNICAL SERVICES	Invoice No. 0711610	(68.00)
21	LEGEND TECHNICAL SERVICES	Invoice No. 0711608	(68.00)
22	Lamb Tech	Invoice No. 1142	(4,375.00)
23	LEGEND TECHNICAL SERVICES	Invoice No. 0807373	(41.60)
24	LEGEND TECHNICAL SERVICES	Invoice No. 0807211	(390.00)
25	LEGEND TECHNICAL SERVICES	Invoice No. 0809433	(40.50)
26			<u></u>
27	RUCO Adjustment To Remove	Expenses Outside of Test Y	ear \$ (6,398)

### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 6 TO TRANSPORTATION EXPENSES

LINE NO.	· DESCRIPTION	REFERENCE	A	MOUNT
1	Jerry and Lori King	CHK 3152	\$	(1,500)
2	Algonquin Water Services	Invoice No. SALES000000001019		(12,910)
3	Algonquin Water Services	Invoice No. SALES000000001036		(3,292)
4				
5	RUCO Adjustment To Remove Un	necessary/Inappropriate Expenses	\$	(17,702)
6				
7				
8	Commonwealth Tow & Transport	Invoice No. 4389	\$	(25)
9			•	( ',
10	RUCO Adjustment to Remove No	n-Recurring Expense	\$	(25)
11	-			
12	TOTAL RUCO ADJUSTME	NT TO TRANSPORTATION EXPENSE	s <u>\$</u>	(17,726)

## EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 7 TO RENTAL OF EQUIPMENT

LINE NO.	DESCRIPTION	REFERENCE	ΑM	OUNT
1 2	RAIN FOR RENT PUMP RENTAL DURING SUPERBOWL	Invoice No. 092011748 Invoice No. 0038296	\$	(2,303) (2,084)
3 4	RUCO Adjustment to Remove Non-Reco	urring Expenses	\$	(4,387)
5 6 7	· TOTAL RUCO ADJUSTM	ENT TO RENTAL OF EQUIPMENT	\$	(4,387)

## EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 8 TO MATERIALS AND SUPPLIES

LINE NO.	DESCRIPTION	REFERENCE	AN	MOUNT_
1	Culligan	SEP07-291-09981218-7	\$	(169)
1 2	Culligan	SEP07-291099812260	Ψ	(184)
3	Culligan	OCT07-291099812187		(186)
4	Culligan	OCT07-291099812260		(375)
5	Culligan	291X08946503		(15)
6	Culligan	291X08946602		(428)
7	Culligan	291X09027402		(97)
8	Culligan	291X09027501		(219)
9	Culligan	291X09106107		`(49)
10	Culligan	291X09106206		(353)
11	Culligan	291X09188709		(173)
12	Culligan	291X09188808		(488)
13	Culligan	291X09272404		(322)
14	Culligan	291X09359607		(83)
15	Culligan	291X09359706		(400)
16	Culligan	291X09272305		(51)
17	Culligan	291X09448202		(115)
18	Culligan	291X09448301		(438)
19	Culligan	291X09541600		(317)
20	Culligan	291X09541501		(101)
21	Culligan	291X09641400		(644)
22	Culligan	291X09641301		(126)
23	Culligan	291X09748908		(155)
24	Culligan	291X09749005		(487)
25	-			
26	RUÇO Adjustment To Remo	ve Unnecessary/Inappropriate Expense	s \$	(5,975)
27	· · · · · · · · · · · · · · · · · · ·			
28				
29	HARRINGTON INDUSTRIAL PI	_ASTIC{Invoice No. 015B0142A	\$	(662)
30	Pro-Tec Environmental Inc.	Invoice No. 07091001		(6,351)
31	ZEP MFG COMPANY	Invoice No. 69643508		(256)
32	ZEP MFG COMPANY	Invoice No. 69640081		(276)
33				
34	RUCO Adjustment To	Remove Expenses Outside of Test Ye	ar _\$_	(7,545)
35	•	•		
36				
37	TOTAL RUCO ADJUS	STMENT TO MATERIALS AND SUPPLIE	S_\$_	(13,520)

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## EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 9 TO MISCELLANEOUS EXPENSES

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	DEGGI (II TIOI	NEI ENEROE	AWIOOITI
1	Bank Charges	11/5 merchant fee	\$ (1,537.71)
2	Bank Charges	Write off Unrec Variance	(338.37)
3	Bank Charges	1/3 Merchant Fees	(862.48)
4	Bank Charges	Merchant Fees	(13.58)
5	Bank Charges	2/5 Merchant Fees	(981.61)
6	Bank Charges	BANK & MERCHANT FEES	(1,109.27)
7	Bank Charges	Merchant Fees	(1,072.00)
8	Meals and Entertainment	PRTS/TOOLS/MLS/GAS/MILGE/TELEP	(91.93)
9	Meals and Entertainment	MATERIAL/TRAVEL/UTILITIES	(76.56)
10	Meals and Entertainment	MTRL/TRVL/TELEPHONE	(27.97)
11	Meals and Entertainment	PARTS/EQPMT/TRAVEL/TELEPHONE	(116.41)
12	Meals and Entertainment	PARTS/TRAVEL/ TELEPHONE	(15.82)
13	Meals and Entertainment	PARTS/TRAVEL/CELLULAR	(14.98)
14	Meals and Entertainment	8600-0200-repairs	(150.74)
15		·	,
16	RUCO Adjustment To Remo	ve Unnecessary/Inappropriate Expenses	\$ (6,409)
17	-		
18	TOTAL RUCO	ADJUSTMENT TO MISCELLANEOUS EXPENSI	\$ (6,409)

Note: Descriptions and references above are per company journal entries in the general ledger.

#### **EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 10** TO BAD DEBT EXPENSE

Line No.	Description						-	A	mount				
1 Bad 2	Debt Expense Company as Filed							\$	43,889				
	Year Revenues Company as File	d				\$ 6	3,383,886						
4 Bad	Debt Percentage RUCO Selected				x _		0.0476%						
	Debt Expense RUCO Adjusted								3,041				
6	•							_	(40.040)				
7	RUCO	\DJ	USTMEN	T	O BAD DE	311	EXPENSE	\$	(40,848)				
8													
9			10/-		Divisio					Mat	er Division		
10	-		vva	ste	water Divisi	on				vvat	CI DIVISION		
11			(A)		(B)		(C)		(D)		(E)		(F)
12			(A)		(D)		(0)		(5)		()		( )
13 14		Te	est Year	F	rior Year	Р	rior Year	Te	est Year	Ρı	rior Year	Pr	ior Year
15			Ended		Ended		Ended		Ended		Ended		Ended
16	Description	30	-Sep-08	3	0-Sep-07	3	0-Sep-06	30	-Sep-08	30	)-Sep-07	30	-Sep-06
17													
18 Rev	renues	\$6	383,886	\$	6,191,689	\$	5,851,080	\$6	,851,029	\$ 6	5,749,901	\$6	,389,605
19								_		•	4 000	Φ.	20.402
20 Bad	Debt Expense	\$	43,889	\$	19,632	\$	2,773	\$	3,264	\$	1,898	\$	20,483
21					0.04740/		0.04740/		0.0476%	ı	0.0281%		0.3206%
22 Bad	Debt as a % of Revenues (L3 / L1)		0.6875%		0.3171%		0.0474%		0.0476%	ļ	0.020176		0.520070
23			0.400/		E 000/				1.50%		5.64%		
	wth in Revenues from Prior Year		3.10%		5.82%				1.50 /0		5.0470		
25 26 Gro	wth in Bad Debt from Prior Year		123.56%		607.97%				71.97%		-90.73%		

#### References:

Revenues and Bad Debt Expense in Columns (A), (B) and (C): Company Schedule E-2 -- Wastewater Division Revenues and Bad Debt Expense in Columns (D), (E) and (F): Company Schedule E-2 -- Water Division

Note: For purposes of making its adjustment to bad debt expense, RUCO utilized the 0.0476% bad debt as a percent of revenues figure experienced by the Company's Water Division during the test year ended September 30, 2008. This figure appears in Column D, Line 18, of the chart above.

## EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 11a TO DEPRECIATION EXPENSE

				RUCO	PROPOSED	PF	ROPOSED
	ACCT			ORIGINAL	DEPR	_	DEPR
<u>NO.</u>	<u>NO.</u>	PLANT ACCOUNT		COST	RATE		XPENSE
1	351	Organization	\$	-			
2	353	Land		1,783,426			
3	354	Structures & Improvements		15,051,970	3.33%		501,231
4	355	Power Generation		548,674	5.00%		27,434
5	360	Collection Sewer Forced		996,458	2.00%		19,929
6	361	Collection Sewers Gravity		21,317,631	2.00%		426,353
7	362	Special Collecting Structures			2.00%		-
8	363	Customer Services		-	2.00%		-
9	364	Flow Measuring Devices		46,607	10.00%		4,661
10	366	Reuse Services		3,788,219	2.00%		75,764
11	367	Reuse Meters and Installation		52,331	8.33%		4,359
12	370	Receiving Wells		860,393	3.33%		28,651
13	371	Pumping Equipment		1,573,415	12.50%		196,677
14	374	Reuse Distribution Reservoirs		62,825	2.50%		1,571
15	375	Reuse Trans. and Dist. System	•	340,677	2.50%		8,517
16	380	Treatment & Disposal Equip.		5,405,671	5.00%		270,284
17	381	Plant Sewers		47,608	5.00%		2,380
18	382	Outfall Sewer Lines		343,681	3.33%		11,445
19	389	Other Sewer Plant & Equip.		603,155	6.67%		40,230
20	390	Office Furniture & Equipment		198,772	6.67%		13,258
21	391	Transportation Equipment		26,078	20.00%		5,216
22	392	Stores Equipment		8,968	4.00%		359
23	393	Tools, Shop And Garage Equip		56,167	5.00%		2,808
24	394	Laboratory Equip		173,948	10.00%		17,395
25	396	Communication Equip		414,146	10.00%		41,415
26	398	Other Tangible Plant		+ 1+, 1+O	10.0070		71,710
27	530	Other rangible riant		_			_
28		,	TOTALS \$	53,700,820	<del>-</del>	\$	1,699,935
29			TOTALS \$	55,700,620	<del>-</del> , –	Ψ	1,033,333
30							
31		Less Amortization	of Contribution	c nor Compan	v.C 2 Page 2	æ	(374,743)
32		Less Amortization	Of Continuation	s per Compan	y C-2, Page 2	Ψ	(374,743)
32 33		Total	Oronogod Donr	ociation Evnon	so Por PUCO	•	1,325,192
		i Otal i	Proposed Depre	eciation Expen	se Fel ROCO	Φ	1,323,192
34		Total Dec	nasad Danusais	tien Elmanee	Dar Campani	¢.	1 550 337
35		i otal Pro	posed Deprecia	ation Expense	Per Company	Ф	1,550,237
36			Mat Dans	( . D		<u> </u>	(225.045)
37			Net Decrea	ise to Deprecia	ation Expense_	Φ	(225,045)
38							
39					<b>-</b>	_	100E 04E
40		RUCO Ad	justment To P	lant Deprecia	tion Expense	\$	(225,045)

## EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 11b TO DEPRECIATION EXPENSE

LINE		•	Bonds	2001 Series Bonds	Combined Total		
NO.	DESCRIPTION	REFERENCE	(A)	(B)	(A) + (B)	_	
1 2	Aggregate Principal Balance of IDA Bonds Allowable Debt Issuance Cost	1999 & 2001 IDA Bond Contracts	\$5,335,000 2.00%	\$7,500,000 2.00%	\$12,835,000	)	
3	Allowable Debt 1994at loc door						
4	Total Allowable Debt Issuance Cost	Line 1 X Line 2	\$ 106,700	\$ 150,000	\$ 256,700	)	
5	Term of Bond Issue, in Years	1999 & 2001 IDA Bond Contracts	24	30		_	
6							
7	Annual Debt Issuance Amortization Expense	Line 4 / Line 5	\$ 4,446	\$ 5,000			
8	Cost Allocation Percentage to Wastewater Di	vision			50.009	%	
9						_	
10		Total Amortization o	of Debt Discou	int Per RUCO	\$ 4,723	3	
11				. A. Ell. J	o 44.05	0	
12		Test Year Adjusted Amortization	n of Debt Disc	count As Filed	\$ 14,658	ם	
13					e (0.03)	<u></u>	
14		RUCO Adjustment To Amo	rtization of D	ebt Discount	\$ (9,93	<u>3)</u>	
15				=\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	£ (0.02	<u>-</u>	
16	Т	OTAL RUCO ADJUSTMENT TO D	EPRECIATION	ON EXPENSE	\$ (9,93	<u>ગ</u>	

#### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 12 TO PROPERTY TAX

LINE NO.	DESCRIPTION	REFERENCE	(A)		(B)
	,				
1	Calculation Of The Company's Full Cash Value:				
2					
3	Annual Operating Revenues:	Co. Sch E-2, Line 4	6 383.886		
4	Year Ended 09/30/2008	Co. Sch E-2, Line 4	6,191,689		
5	Year Ended 09/30/2007	Co. Sch E-2, Line 4	5,851,080		
6	Year Ended 09/30/2006	Sum of Lines 4, 5, & 6			
7	Total Three Year Operating Revenues		6,142,218		
8	Average Annual Operating Revenues	Lille 113	0,142,210		
9		Line 8 X 2		\$ 12	2,284,437
10	Two Times Three Year Average Operating Revenues	Line o A 2		Ψ 12	.,201,101
11					
12	ADD:				
13	10% of construction Work In Progress ("CWIP"):	Co. Sch E-1, Line 4	\$ 393,011		
14	Test Year CWIP		ş 393,011	\$	39,301
15	10% of CWIP	Line 14 X 10%		Φ	39,301
16	•				
17	SUBTRACT:				
18	Transportation at Book Value:				
19	Original Cost of Transportation Equipment				
20	Accum. Depr. Of Transportation Equipment			•	
21	Book Value of Transportation Equipment	Line 19 + Line 20		\$	-
22					2 202 722
23	Company's Full Cash Value ("FCV")	Sum of Lines 10, 15, & 21		12	2,323,738
24					
25	Calculation Of The Company's Tax Liability:				
26					
27	MULTIPLY:				
28	FCV X Valuation Assessment Ratio X Property Tax R	Rates:			
29	Assessment Ratio (2010)	House Bill 2779	22.5000%		
30	Assessed Value	Line 23 X 29	\$ 2,772,841		
31					
32	Property Tax Rates:				
33	Primary Tax Rate	JMM 1.50 - 2008 Budget	7.1250%		
34	Secondary Tax Rate	JMM 1.50 - 2008 Budget	4.0690%		
35	Estimated Tax Rate Liability	Line 33 + Line 34	11.1940%	6	
36					
37	Company's Total Tax Liability - Based on Full Cash Valu	Line 30 X Line 35		\$	310,392
38	•				
39	Test Year Adjusted Property Tax Expense As Filed	Co. Sch. C-1, Line 28			373,354
40	Decrease in Property Tax Expense	Line 37 - Line 39		\$	(62,962)
41					
42	TOTAL RUC	O ADJUSTMENT TO PRO	PERTY TAXE	s <u>\$</u>	(62,962)

### EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 13 TO INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	(A) REFERENCE	(B) AMOUNT		
4					
1	FEDERAL INCOME TAXES:				
2 3	Operating Income Before Taxes	Sch 4, Page 1, Col C, Lines 32 + 37	\$ 708,959		
4	Less: ,	001 4, 1 age 1, 001 0, Lines 02 · 07	Ψ 700,000		
5	Arizona State Tax	Line 21	\$ (32,521)		
6	Interest Expense	Note (A), Line 35	(242,238)		
7	Federal Taxable Income	Line 3 + Line 5 + Line 6			
8	Tederal raxable moome		, , , , , , , , , , , , , , , , , , , ,		
9	Federal Tax Rate	Schedule 1, Page 2	34.0000%		
10	Federal Income Tax Expense	Line 7 X Line 9			
11		=			
12	STATE INCOME TAXES:				
13					
14	Operating Income Before Taxes	Sch 4, Page 1, Col C, Lines 32 + 37	\$ 708,959		
15	LESS:				
16	Interest Expense	Note (A), Line 35	(242,238)		
17	State Taxable Income	Line 14 + Line 16	\$ 466,721		
18	•				
19	State Tax Rate	Tax Rate	6.9680%		
20					
21	State Income Expense	Line 17 X Line 19	\$ 32,521		
22		-			
23	TOTAL INCOME TAX EXPENSE:				
24	Federal Income Tax Expense	Line 10	\$ 147,628		
25	State Income Tax Expense	Line 21	32,521		
26	Total Income Tax Expense Per RUC	O Line 24 + Line 25	\$ 180,149		
27	Total Income Tax Expense Per Com	pany Company Sch C-1	(99,906)		
28	Total RUCO Income Tax Adjustn	nent Line 26 - Line 27	\$ 280,055		
29					
30					
31	NOȚE (A)				
32	Interest Synchronization:				
33	Adjusted Rate Base	\$ 21,248,950			
34	Weighted Avg. Cost of Debt	1.14%			
35	Synchronized Interest Expense (L33 X L34)	\$ 242,238			

Test Year Ended September 30, 2008

#### Wastewater Revenue Summary and Rates

•	P	ompany resent Rates	F	RUCO Proposed Rates	(De	crease/ ecrease) mount	Increase/ (Decrease) Percent	Pre	RUCO oposed o. Rate	Rate	ICO e Per isand
Revenue By Class				•							
Residential	\$4	,610,726	\$	5,636,274	\$ 1	,025,548	22.24%	\$	33.25		
Residential HOA 135		44,064		53,865		9,801	22.24%		33.25		
Residential HOA 160		52,224		63,840		11,616	22.24%		33.25		
Residential HOA 520		169,728		207,480		37,752	22.24%		33.25		
Subtotal	\$4	,876,742	\$	5,961,459	\$ 1	,084,717	22.24%				
Multi-Unit 3	\$	9,923	\$	12,128	\$	2,205	22.22%	\$	30.86		
Multi-Unit 5		3,156		3,858		702	22.23%		30.86		
Multi-Unit 6		1,818		2,222		404	22.22%		30.86		
Multi-Unit 7		8,484		10,369		1,885	22.22%		30.86		
Multi-Unit 8		75,144		91,839		16,695	22.22%		30.86		
Multi-Unit 9		2,727		3,333		606	22.22%		30.86		
Multi-Unit 14		46,662		57,029		10,367	22.22%		30.86		
Multi-Unit 16		116,352		142,203		25,851	22.22%		30.86		
Multi-Unit 17		5,151		6,295		1,144	22.22%		30.86		
Multi-Unit 18		5,454		6,666		1,212	22.22%		30.86		
Multi-Unit 24		7,272		8,888		1,616	22.22%		30.86		
Multi-Unit 46		13,938		17,035		3,097	22.22%		30.86		
Multi-Unit 84		25,452		31,107		5,655	22.22%		30.86		
Multi-Unit 90		27,270		33,329		6,059	22.22%		30.86		
Multi-Unit 132		79,992		97,764		17,772	22.22%		30.86		
Multi-Unit 304		92,112		112,577		20,465	22.22%	-	30.86		
Subtotal Multi-Unit	\$	520,907	\$	636,642	\$	115,735	22.22%				
Small Commercial	\$	84,456	\$	103,238	\$	18,782	22.24%	\$	56.23		
Measured Regular Domestic Service	\$	277,822	\$	354,781	\$	76,959	27.70%	\$	31.48	\$	2.61
Msrd Restrnt, Motels, Groc, Dry Clean	•	234,293	•	271,981	•	37,688			31.48		3.53
Subtotal Measured Service	\$	512,115	\$		\$	114,647		-			
Wireyer Boost Por Boom	\$	103,929	\$	127,061	\$	23,132	22.26%	\$	30.85		
Wigwam Resort - Per Room Wigwam Resort - Main	Ψ	12,000	Ψ	14,670	•	2,670			1,222.50		
Subtotal Wigwam	\$	115,929	\$		\$	25,802		_			
Elementary Schools	\$	32,640	\$	39,902	\$	7,262	22.25%	\$	831.30		
Middle and High Schools	•	28,800		35,208		6,408	22.25%		978.00		
Community College		14,880		18,191		3,311	22.25%	<u></u>	1,515.90		
Subtotal Educational Facilities	\$	76,320	\$	93,301	\$	16,981	22.25%	·			
Effluent @ \$0.1688/thousand	\$	50,842	\$	448,604	\$	397,763			.50/thou		
Effluent @ \$0.6905/thousand	•	44,331		80,310		35,979		<u>6</u> \$1	.50/thou		
Subtotal Effluent Sales	\$	95,173				433,741	455.74%	0			
Total Revenue	\$	6,281,642	\$	8,092,047	\$	1,810,405	28.82%	<u> </u>			